50272-101

REPORT DOCUMENTATION PAGE	1. REPORT NO. PREASSIGNED NTIS PB94-161080	2.	3. Recipient's Accession No.

4. Title and Subtitle
Updating the Geographic Practice Cost-Index: The Physician Work GPCI

5. Report Date
May 1994

6.

7. Author(s)
Gregory C. Pope and Debra A. Dayhoff

8. Performing Organization Rept. No.

9. Performing Organization Name and Address
Health Economics Research, Inc.
300 Fifth Avenue
6th Floor
Waltham, MA 02154

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.
(C) 500-89-0050.5
(G)

12. Sponsoring Organization Name and Address
Health Care Financing Administration
ORD/OR/DPES/NISB
2-B-14 Oak Meadows Bldg.
6325 Security Blvd., Baltimore, MD 21207

13. Type of Report & Period Covered
1995, 1996 Final

14.

15. Supplementary Notes
See also PB94-161072; PB94-161098; and PB94-161106. This study supports the Notice of Proposed Rule Making (BPD-789-P) "Medicare Program Refinements to the Physician Fee Schedule Geographic Factor Values and Other Changes", forthcoming in the Federal Register in June 1994.

16. Abstract (Limit: 200 words)

The Omnibus Budget Reconciliation Act (OBRA) of 1989 reformed Medicare payment for physician services as of January 1, 1992. On that date, Medicare began paying physicians on the basis of a national Medicare Fee Schedule (MFS) instead of usual, customary, and reasonable charges. Payments to physicians are now calculated from national uniform relative values and various conversion factors adjusted for justifiable geographic differences in physicians' cost of practice using a geographic adjustment factor termed the Medicare Geographic Practice Cost Index (GPCI). Subsequently, OBRA 1990 required that the GPCI be reviewed periodically and revised as necessary. The subject study supported HCFA's review of the original GPCIs; assessed the Medicare quarter work GPCI in effect from 1992-1994; and recommended a number of alternatives that might be used to update the quarter work GPCI. Study recommendations were to use: (1) 1990 Census data instead of 1980 data, (2) median earnings for professionals of all education levels (with a 1-digit occupation mix correction), (3) county-specific earnings where available in large metropolitan areas, and (4) relative-value weighing instead of population weighing. The report describes the Census data and methodology for calculating alternative physician work GPCIs. Tables include but are not limited to comparisons of -- alternative (1995/1996) updated work GPCIs to the current 1992-1994 GPCIs (full variation and quarter variation); proposed physician work GPCI to GPCIs based on earnings of physicians and non-manufacturing workers; 1996 work GPCIs weighted by relative value units and by population; and proposed 1995 and 1996 GPCIs (rescaled for budget neutrality) to the 1992-1994 GPCIs.

17. Document Analysis a. Descriptors

-

b. Identifiers/Open-Ended Terms
Medicare physician payment; Georgraphic Practice Cost-Index; GPCI; Laspeyres input price index; Medicare Fee Schedule; Geographic Adjustment Factor

c. COSATI Field/Group

18. Availability Statement:	19. Security Class (This Report)	21. No. of Pages
Release Unlimited	Unclassified	111
	20. Security Class (This Page) Unclassified	22. Price

UPDATING THE GEOGRAPHIC PRACTICE COST INDEX: THE PHYSICIAN WORK GPCI

Final Report

Submitted by:

Gregory C. Pope, M.S.
Debra A. Dayhoff, Ph.D.

August 27, 1993
(Revised May 1994)

This report was prepared under Health Care Financing Administration Contract No. 500-89-0050 to Health Economics Research, Inc. The assistance of our HCFA Project Officer, Sherry Terrell, Ph.D., is gratefully acknowledged. The statements contained in this report are solely those of the authors and do not necessarily reflect the views or policies of the Health Care Financing Administration. The contractor (or grantee) assumes responsibility for the accuracy and completeness of the information contained in this report.

TABLE OF CONTENTS

PAGE

EXECUTIVE SUMMARY

1.0 INTRODUCTION . . . . . -1-
1.1 Background on the Physician GPCI . . . . . -1-
1.2 Criticisms of the Physician Work GPCI . . . . . -2-
1.3 Overview of the Report . . . . . -2-

2.0 DATA FOR THE PHYSICIAN WORK GPCI . . . . . -3-
2.1 Description of Census Data . . . . . -3-
2.2 Sample Sizes in the Census Data . . . . . -4-

3.0 METHODS FOR CALCULATING ALTERNATIVE PHYSICIAN WORK GPCIs . . . . . -6-
3.1 Occupation Shares for Professional Specialty Occupations . . . . . -8-
3.1.1 Computation of Shares . . . . . -8-
3.1.2 Updated Shares . . . . . -8-
3.2 Methods Used to Calculate Alternative Physicians Work GPCIs . . . . . -10-
3.2.1 Create County File of Wages for Occupation Categories . . . . . -10-
3.2.2 Calculate County Index . . . . . -12-
3.2.3 Translate County Index to Medicare Payment Localities . . . . . -13-
3.2.4 Quarter Variation Work GPCI . . . . . -13-

4.0 ALTERNATIVE PHYSICIAN WORK GPCIs . . . . . -13-
4.1 All Education Sample . . . . . -14-
4.2 Advanced Degree Sample . . . . . -14-
4.3 County Specific Earnings in CMSAs . . . . . -20-
4.4 Two Digit Occupations . . . . . -22-
4.5 Mean Earnings Instead of Median Earnings . . . . . -25-

5.0 COMPARISON OF PHYSICIAN WORK GPCI TO ALTERNATIVE EARNINGS INDEXES . . . . . -28-
5.1 Conceptual Issues in the Choice of Physician Work GPCI . . . . . -28-
5.2 Comparison of Relative Professional Earnings to Relative Earnings of All Non-manufacturing Workers . . . . . -30-
5.3 Comparison of Relative Professional Earnings to Relative Physician Earnings . . . . . -33-
5.3.1 Census Physician Earnings Data . . . . . -33-
5.3.2 Results . . . . . -34-

6.0 FINAL PAYMENT PHYSICIAN WORK GPCIs . . . . . -40-

REFERENCES

APPENDIX 1 ALTERNATIVE UPDATED PHYSICIAN WORK GPCIs COMPARED TO 1992 (CURRENT) GPCI (Full Variation)

APPENDIX 2 ALTERNATIVE UPDATED PHYSICIAN WORK GPCIs COMPARED TO 1992 (CURRENT) GPCI (Quarter Variation)

TABLE OF CONTENTS (continued)

APPENDIX 3	COMPARISON OF PHYSICIAN WORK GPCI TO EARNINGS OF PHYSICIANS AND NON-MANUFACTURING WORKERS (Full Variation)
APPENDIX 4	DIFFERENCE BETWEEN 1996 PHYSICIAN WORK GPCI WEIGHTED BY RELATIVE VALUE UNITS (RVUs) AND POPULATION, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE
APPENDIX 5	FINAL PHYSICIAN WORK GPCIs BY MEDICARE PAYMENT LOCALITY
APPENDIX 6	DIFFERENCE BETWEEN 1996 RESCALED PHYSICIAN WORK GPCI AND 1992 PHYSICIAN WORK GPCI, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

TABLE OF TABLES

		PAGE
TABLE 2-1	DISTRIBUTION OF 1990 CENSUS PROFESSIONAL SPECIALTY OCCUPATION SAMPLE SIZES BY MEDICARE PAYMENT LOCALITY	-5-
TABLE 2-2	DISTRIBUTION OF 1990 CENSUS PROFESSIONAL SPECIALTY OCCUPATION SAMPLE SIZES BY MEDICARE PAYMENT LOCALITY, ADVANCED DEGREE SAMPLE	-7-
TABLE 3-1	OCCUPATIONAL SHARES FOR THE PHYSICIAN WORK GPCI	-9-
TABLE 3-2	TWO DIGIT OCCUPATIONAL SHARES FOR THE PHYSICIAN WORK GPCI	-11-
TABLE 4-1	LOCALITIES EXPERIENCING LARGE CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF UPDATING WITH 1990 CENSUS DATA	-15-
TABLE 4-2	LOCALITIES EXPERIENCING LARGE CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF USING EARNINGS OF PROFESSIONALS WITH ADVANCED DEGREES	-18-
TABLE 4-3	LOCALITIES EXPERIENCING THE LARGEST CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF USING COUNTY-SPECIFIC EARNINGS IN CMSAs	-21-
TABLE 4-4	LOCALITIES EXPERIENCING THE LARGEST CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF USING 2-DIGIT PROFESSIONAL OCCUPATIONS	-23-
TABLE 4-5	LOCALITIES EXPERIENCING LARGE CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF USING MEAN RATHER THAN MEDIAN EARNINGS	-26-
TABLE 5-1	LOCALITIES WITH LARGE DIFFERENCES BETWEEN THE PHYSICIAN WORK GPCI AND WAGES OF ALL NONMANUFACTURING WORKERS	-31-
TABLE 5-2	LOCALITIES WITH LARGE DIFFERENCES BETWEEN THE PHYSICIAN WORK GPCI AND HOURLY EARNINGS OF PHYSICIANS	-35-
TABLE 5-3	LOCALITIES WITH LARGE DIFFERENCES BETWEEN THE PHYSICIAN WORK GPCI AND HOURLY EARNINGS OF PHYSICIANS IN PHYSICIANS' OFFICES	-37-

UPDATING THE GEOGRAPHIC PRACTICE COST INDEX: THE PHYSICIAN WORK GPCI

EXECUTIVE SUMMARY

The Geographic Practice Cost Index (GPCI) is an input price index used to adjust Medicare Fee Schedule payments for geographic variations in physicians' practice costs. The GPCI has three components: physician work, practice expense, and malpractice insurance. The 1992 physician work GPCI is an index of professional earnings computed from 1980 Census data. Congress specified that only one-quarter of the variation in the cost of physician work be reflected in Medicare payments. We refer to this payment GPCI as the "quarter work GPCI", and the professional earnings index as the "full work GPCI". This report presents alternative updated work GPCIs calculated with 1990 Census earnings data.

We considered five alternatives for updating the physician work GPCI with 1990 Census professional earnings. These alternatives were:

(1) Earnings for professionals of all education levels;
(2) Earnings for professionals with advanced degrees only;
(3) County-specific earnings for counties in large metropolitan areas;
(4) 2-digit professional occupations rather than 1-digit professional occupations; and
(5) Mean hourly earnings rather than median hourly earnings.

We recommended that median earnings for professionals of all education levels, with a 1-digit occupation mix correction, should be employed in the work GPCI. Although attractive in theory, Census sample sizes of professionals with advanced degrees, or classified into 2-digit occupations, are very small in the less populous Medicare payment localities. The advanced degree education or 2-digit occupation mix refinements could introduce undesirable random error into the GPCI in these localities. In addition, we prefer median earnings to mean earnings because medians are less sensitive to the extreme "tails" of the earnings distribution.

Using earnings of professionals of all education levels represents a change in methodology from the current work GPCI, which was computed from 1980 Census earnings of professionals with 5 or more years of college education. That sample is no longer available with the 1990 Census. Using all education levels rather than only the most highly

educated results in only small changes in the quarter work GPCI in virtually all payment localities.

A further change we recommended in the updated (1996) work GPCI is weighting by work relative value units (RVUs) rather than by population. The reasons for weighting by RVUs are twofold. First, RVUs (which are available by county of location of service) provide a better indication of where services are provided. The GPCI should be weighted to reflect input prices at these locations. Second, weighting by RVUs guarantees that total Medicare Fee Schedule payments for physician work will not change if the payment localities are revised (e.g., if a state with multiple payment localities becomes a single statewide locality). Appendix 4 shows the (minor) differences between the 1996 RVU and population weighted quarter work GPCIs.

We recommended that in large metropolitan areas, county-specific earnings should replace metropolitan-area-wide earnings. County earnings better account for input price variation within large metropolitan areas. Payment localities composed of central city regions (e.g., Manhattan, San Francisco) benefit from this change, whereas localities including suburban ring counties lose, although the changes are not large (see Table 4-3). We believe that this change is appropriate because input prices are in fact higher in central city areas. We did not utilize county-specific earnings for all counties because sample sizes of professionals in most counties are insufficient to accurately measure earnings.

The Health Care Financing Administration concurred with our recommendations for the updated work GPCI. The 1996 work GPCI is based on 1990 Census median hourly earnings of professional workers of all education levels, county-specific earnings data in large metropolitan areas, a one-digit occupation mix correction, and weighting by work RVUs. The differences from the 1992 work GPCI are the use of 1990 rather than 1980 Census data, all education levels rather than 5 or more years of college, county-specific earnings in large urban areas rather than metropolitan area earnings, weighting by RVUs rather than population, the classification of all workers by place of work rather than some by place of

residence,[1] and the use of the Office of Management and Budget's June 1993 metropolitan area redefinitions.[2]

The final GPCIs by Medicare payment locality are shown in Appendix 5. That table begins with the 1996 full work GPCI, then shows the 1996 quarter work GPCI. HCFA actuaries developed a multiplicative factor (1.00073) that was used to ensure that total Medicare Fee Schedule payments for physician work are not affected by the updated work GPCI. The 1996 rescaled quarter work GPCI reflects this factor. This rescaled GPCI will be used for payment beginning in 1996. The 1995 rescaled quarter work GPCI is a simple average of the 1996 rescaled quarter work GPCI and the 1992 quarter work GPCI. The 1995 rescaled quarter work GPCI will be used for payment in 1995 only.

Appendix 6 ranks the Medicare payment localities by descending difference between the 1996 rescaled quarter work GPCI and the 1992 quarter work GPCI. The changes in the quarter work GPCI index values from updating (1996 versus 1992 GPCI) are small. No Medicare payment locality gains or loses as much as 5 percent. The quarter work GPCI comprises about half of the overall Medicare Fee Schedule Geographic Adjustment Factor (GAF). Therefore, Medicare fees for a typical service will change by less than 2.5 percent in any area due to updating the work GPCI. Moreover, Congress has mandated a two-year transition from the 1992 to the 1996 GPCIs. The change in the 1995 transitional work GPCI is only half as large as the already small difference between the 1996 and 1992 GPCIs.

---

[1]In the 1992 work GPCI, for sample size reasons, place of work classification was only used in large metropolitan areas. In other areas, workers were classified by their place of residence.

[2]Although the GPCI is eventually calculated for Medicare payment localities, the Census Bureau tabulates the underlying earnings data for metropolitan areas and the nonmetropolitan portions of states before it is crosswalked to localities (see Chapter 3).

1.0 INTRODUCTION

1.1 Background on the Physician GPCI

The Geographic Practice Cost Index (GPCI) is used in adjusting Medicare Fee Schedule payments for regional variations in physicians' cost of practice. The GPCI is an input price index that measures the relative cost of a standard market basket of physician practice inputs across areas. The Laspeyres index number form chosen for the GPCI requires two basic components: national shares of each practice input in total practice expenses and relative price terms for each area. GPCI index values for each area are calculated by weighting the relative price terms by the national expense shares to form an average relative price for practice inputs in each area.

Relative prices by area are determined for four practice inputs: physician time, nonphysician employee wages, malpractice insurance premiums, and office rent. Geographic variation in the price of medical equipment, medical supplies, and miscellaneous is felt to be minimal. Congress specified that the GPCI be divided into three components for the Medicare Fee Schedule: the physician work GPCI, the practice expense GPCI, and the malpractice GPCI. Congress further mandated that the work GPCI reflect one-quarter of the variation in the cost of physician time. Zuckerman, Welch, and Pope (1987) argued that an index of professional earnings is an appropriate measure of relative physician time costs. Thus, the physician work GPCI is calculated as:

GPCI(w) = 1 + (PROFESSIONAL WAGE INDEX - 1)/4.

The index of professional wages used in the 1992 physician work GPCI was derived from a special tabulation of 1980 Census data. The Census classification "professional specialty occupations" was used to define six professional occupations (health diagnosing occupations such as physicians were excluded). Indexes of median hourly earnings were derived for each one and combined according to each occupation's share of the total professional specialty wage bill. Earnings were used only from individuals with 5 or more years of college education. The earnings index for metropolitan areas and the nonmetropolitan parts of states was then translated to Medicare payment localities.

1.2 Criticisms of the Physician Work GPCI

Several criticisms have been made of the physician work GPCI. First, the age of the 1980 Census data currently used in the GPCI has been criticized. Second, the use of metropolitan-wide median earnings in the GPCI, including for some possibly higher-cost central city localities such as Manhattan, New York, has been questioned (PPRC, 1992). Finally, some have wondered why an index of professional earnings is used in the GPCI rather than a measure of physician income itself.

We address each of these criticisms in this report. We present updated versions of the physician work GPCI using 1990 Census data and compare them to the 1992 1980-Census-based GPCI. One variant of the updated GPCI uses county-specific earnings in large metropolitan areas to capture higher costs in central-city localities. The choice of an index of professional earnings versus one of physician earnings is largely a conceptual issue that was discussed in Zuckerman, Welch, and Pope (1987). We review the reasons why professional earnings are preferable for the GPCI in Chapter 5. Also, in Chapter 5, we compare 1990 Census physician hourly earnings to professional hourly earnings.

1.3 Overview of the Report

In the next chapter, we describe the 1990 Census data analyzed in this report, including sample sizes for alternative occupation/education categories by Medicare locality. Chapter 3 presents 1990 Census occupational wage bill shares for professional specialty occupations and compares them to their 1980 Census counterparts. Chapter 4 presents and evaluates alternative physician work GPCIs computed from the 1990 Census data. Differences are evaluated by focussing on Medicare payment localities with large changes in GPCIs between variants. Both full and quarter variation work GPCIs are presented. Chapter 5 compares the work GPCIs derived from professional earnings to indexes of nonmanufacturing earnings and physician earnings.

Chapter 6 discusses the final GPCIs that the Health Care Financing Administration has decided to use for payment. Appendices 1 and 2 contain tables comparing alternatives for updating the physician work GPCI to the 1992 work GPCI. Appendix 1 makes the comparison for the full work GPCI and Appendix 2 for the quarter work GPCI. Appendix 3 compares the updated GPCI to alternative earnings series, of all non-manufacturing workers, and of physicians. Appendix 4 compares RVU- and population-weighted updated work

GPCIs. Appendix 5 contains a table of the final work GPCIs to be used in the Medicare Fee Schedule, and Appendix 6 examines the difference between the 1996 and 1992 quarter work GPCIs. The index values in Appendices 1, 2, and 3 are not directly comparable to the index values in Appendices 5 and 6. The GPCIs in Appendices 1, 2, and 3 are population-weighted, whereas the GPCIs in Appendices 5 and 6 are work-RVU-weighted. Also, Appendices 4, 5, and 6 reflect the Office of Management and Budget's June 1993 update of metropolitan area definitions, which are not reflected in Appendices 1, 2, and 3.

2.0 DATA FOR THE PHYSICIAN WORK GPCI

Relative professional earnings are used to measure the relative cost of physician time in the work GPCI. Zuckerman, Welch, and Pope (1987) concluded that decennial Census data were the best available to measure professional earnings, and 1980 Census data are used in the current GPCI. Since that report, the Physician Payment Review Commission (PPRC, 1991) and the U. S. General Accounting Office (GAO, 1993) have reviewed the GPCI and have concluded that the Census data is an appropriate choice for use in the physician work GPCI, although the 1980 Census data need to be updated.

2.1 Description of Census Data

As part of the decennial Census, questions on income, hours worked, place of work, and occupation are asked of roughly 20 percent of the United States population (the exact sampling rate varies by type of area). All Census data are self reported. Health Economics Research, Inc., contractor to the Health Care Financing Administration, obtained a special tabulation of 1990 Census earnings data by occupation and area from the U.S. Bureau of the Census. The sample is the experienced civilian labor force. Earnings are defined as the sum of wage or salary income and net income from self-employment. (Nonlabor income is excluded.) Both mean and median hourly earnings are tabulated, with workers classified by their place of work. For the 1980 Census, place of work was tabulated for only one-half of the full sample. In 1990, place of work is assigned for most workers, so the place of work sample is nearly as large as the place of residence sample. All 1990 Census data presented in this report classify workers by place of work. Earnings data were obtained for metropolitan areas, counties, states, and the nonmetropolitan portions of states.

For certain occupations, earnings data were also obtained with the sample restricted to individuals possessing advanced degrees, defined as a master's degree, professional school degree (e.g., MBA, JD), or doctorate. The 1990 Census educational classifications, which are by highest degree earned, differ from the 1980 classification by years of schooling. Thus, it was not possible to obtain earnings exactly comparable to the 1980 data. For 1990, data is available for all-education and advanced degree samples, but not for 5 or more years of college. Earnings for some occupations are also available cross-classified by certain industry groupings, such as earnings of all non-manufacturing workers.

2.2 Sample Sizes in the Census Data

Table 2-1 presents the distribution by Medicare payment locality of 1990 Census sample sizes for each occupation group comprising the physician work GPCI, and for office based physicians. These sample sizes are for workers of all education levels. Census provides estimates of the total number of people in each occupation/area cell. We have divided by 6 to (conservatively) account for the Census "long form" sampling rate of 15-20 percent on earnings questions. The share (weight) of each occupation in the physician work GPCI is also indicated.

Sample sizes for teachers are large, much greater than for any other one-digit occupation category. The smallest sample is 250, and earnings in three-fourths of all localities is based on more than 2,000 teachers. Sample sizes are much smaller for four occupation groups: (1) engineers, (2) social scientists, social workers, and lawyers, (3) RNs and pharmacists, and (4) writers, artists and athletes. However, the smallest locality samples of 30 to 59 workers are not so small that we would expect median earnings to be subject to significant random sampling error. The sample of natural scientists and mathematicians is quite small in some localities, with an estimated minimum sample of 10. However, the small sample is a problem for only a few localities; 95 percent of the localities have samples larger than 39 (the fifth percentile value), and 90 percent of the localities have samples larger than 72 (the tenth percentile value). In addition, with an share of only 10.1 percent in the professional earnings index, random variation in the measured earnings of natural scientists and mathematicians does not have a major effect on the physicians' work GPCI.

We also present the distribution of sample sizes for office based physicians. Physicians' earnings were excluded from the GPCI. However, in Chapter 5 we present comparisons of the professional earnings GPCI with an index of physicians' earnings

TABLE 2-1

DISTRIBUTION OF 1990 CENSUS PROFESSIONAL SPECIALTY OCCUPATION SAMPLE SIZES BY MEDICARE PAYMENT LOCALITY

	Weight in Work GPCI	Minimum	1%	5%	10%	25%	Median	Maximum
1-Digit Categories								
Engineers	18.7 %	30	39	69	155	378	660	16,299
Natural scientists, mathematicians	10.1	10	18	39	72	238	412	11,956
Social scientists, social workers, lawyers	15.3	54	83	151	231	661	1,252	24,596
Teachers	30.7	250	280	550	740	2,164	3,877	33,779
RNs, pharmacists	15.8	59	106	182	265	721	1,477	15,847
Writers, artists, athletes	9.3	45	62	89	144	488	899	25,586
Physicians (office based)*	--	5	13	21	32	84	154	2,307
2-Digit Categories								
Engineers	18.1	30	39	69	155	378	660	16,299
Computer, math occupations	6.7	4	5	11	26	81	177	9,029
Natural scientists	3.1	5	9	18	47	142	230	2,927
Social scientists	2.8	4	7	11	27	76	140	4,153
Social workers	5.0	31	59	90	138	366	724	8,996
Lawyers	10.3	9	19	34	68	154	267	11,448
Teachers, college	4.9	13	20	40	78	228	470	4,438
Teachers, non-college	22.9	211	241	442	594	1,718	3,166	25,893
Voc-ed counselors	1.3	3	6	14	26	81	145	1,636
LIbrarians	0.9	6	9	13	28	74	137	1,813
RNs	11.4	40	74	131	192	537	1,122	11,936
Pharmacists	3.9	19	30	50	88	194	383	3,910
Writers, artists	6.2	27	36	57	115	342	631	18,044
Editors, reporters	2.5	14	17	24	47	128	225	7,263

*Physicians were not included in the GPCI based on professional specialty occupations.

SOURCE: 1990 Census Special Tabulation.

calculated from the Census data. Physician samples in some localities are quite small; the minimum is 5, the first percentile is 13, and the fifth percentile value is 21. These small samples are likely to result in a significant amount of random sampling error in reported physician earnings.

The sample sizes of the two digit occupations are much more problematic, as shown in the bottom panel of Table 2-1. Six of the fourteen occupation categories have minimum sample sizes smaller than 10; three more have minimum samples of between 10 and 20 workers. Six categories have fifth percentile values of less than 25, indicating that the small sample sizes are not just a problem for one or two localities. While these occupations generally do not have large expenditure shares, small sample sizes for several occupations in the same locality could result in a large fraction of the GPCI being based on the median wages of a very small number of workers.

Table 2-2 presents sample sizes for the one-digit occupation categories from the advanced degree sample, which are also problematic in the least populous localities. Sample sizes for three of the occupation groups, (1) engineers, (2) natural scientists and mathematicians, and (3) writers, artists, and athletes are quite small in some localities. Each of these categories has a minimum sample size of one or two workers, and a tenth percentile value less than 20. Sample sizes for RNs and pharmacists are only slightly larger, with a minimum value of 8.

We conclude that the Census sample sizes of one-digit occupations, all education levels, are sufficient to accurately measure median hourly earnings by Medicare payment locality. Earnings estimates for two-digit occupations and for the advanced degree sample are subject to significant random sampling error in the less populous localities, which makes their use in the physician work GPCI problematic.

3.0 METHODS FOR CALCULATING ALTERNATIVE PHYSICIAN WORK GPCIs

The physician work GPCI has two components: (1) expenditure shares by professional specialty occupational category, and (2) geographic wage indexes for professional specialty occupational categories. Section 3.1 discusses determination of the occupation shares and compares the updated shares with those used in constructing the current GPCI. Section 3.2 discusses the methodology used for creating the alternative GPCIs based on indexes of professional earnings for Medicare payment localities.

TABLE 2-2

DISTRIBUTION OF 1990 CENSUS PROFESSIONAL SPECIALTY OCCUPATION SAMPLE SIZES BY MEDICARE PAYMENT LOCALITY, ADVANCED DEGREE SAMPLE

	Weight in Work GPCI	Minimum	1%	5%	10%	25%	Median	Maximum
1-Digit Categories								
Engineers	10.8 %	2	3	8	19	52	81	4,142
Natural scientists, mathematicians	7.6	2	4	6	17	49	88	4,289
Social scientists, social workers, lawyers	29.4	22	30	62	112	305	614	16,591
Teachers	41.6	76	100	167	255	724	1,523	19,762
RNs, pharmacists	6.9	8	11	19	38	102	220	3,467
Writers, artists, athletes	3.6	1	1	7	13	39	78	4,632

SOURCE: 1990 Census Special tabulation.

3.1 Occupation Shares for Professional Specialty Occupations

3.1.1 Computation of Shares

The 1992 physician work GPCI is composed of earnings indexes for six one-digit professional specialty occupations: (1) engineers, surveyors, and architects; (2) natural scientists and mathematicians; (3) social scientists, social workers, and lawyers; (4) teachers, counselors, and librarians; (5) RNs and pharmacists; and (6) writers, artists, and editors. The health diagnosing occupations category (which includes physicians) was intentionally omitted from the work GPCI.

To determine updated occupational shares, the 1990 Census national hourly wage bill for each occupation was estimated by multiplying national median hourly earnings by number of workers, for each occupational category. The share for each occupation was then calculated as the occupation's wage bill as a share of the sum of the wage bills of all six professional specialty occupations used in the GPCI. Shares were calculated analogously for the all education and advanced degree samples, and for the 14 two-digit occupations.

3.1.2 Updated Shares

Table 3-1 presents the 1992 work GPCI occupation shares and the updated one digit occupation shares calculated for both the advanced degree sample and the all education sample. The advanced degree shares are similar to the current shares, which are based on 5 or more years of college education. The all-education shares differ significantly from the shares of the more highly educated.

Teachers, counselors, and librarians comprise the largest portion of the work GPCI. This group's shares are quite similar for the current GPCI (44 percent) and the advanced degree sample (42 percent), but substantially lower for the all education sample (31 percent). Teachers, counselors, and librarians contribute a lower percentage of total hours for professional specialty workers of all education levels than professional workers with advanced degrees, accounting for much of this difference in shares. This pattern is repeated for social scientists, social workers and lawyers; the shares for the 1992 GPCI (26 percent) and the advanced degree sample (29 percent) are quite similar while the share for the all education sample (15 percent) is much lower. In contrast, the share for RNs and pharmacists is over twice as large (16 percent) in the all education sample as in the advanced degree

TABLE 3-1

OCCUPATIONAL SHARES FOR THE PHYSICIAN WORK GPCI

Occupation Category	1992 GPCI Share	Updated share: Advanced Degree Sample	Updated share: All Education Sample
Engineers, Surveyors, and Architects	.140	.109	.187
Natural Scientists and Mathematical	.067	.076	.101
Social Scientists, Social Workers, and Lawyers	.259	.294	.154
Teachers, Counselors, and Librarians	.436	.416	.307
RNs and Pharmacists	.056	.069	.158
Writers, Artists, and Editors	.042	.036	.093

NOTE: Shares are based on national median hourly earnings multiplied by number of workers.

SOURCE: 1980 Census; 1990 Census Special Tabulation

sample (7 percent) or the 1992 GPCI (6 percent). The relatively small number of RNs and pharmacists with advanced degrees (as defined by Census) accounts for this difference.

Table 3-2 presents expenditure shares for two digit occupational categories (all education sample). The three largest shares are for non-postsecondary teachers (23 percent), engineers (18 percent), and registered nurses (11 percent). In contrast, the seven smallest shares (out of fourteen total) have a combined expenditure weight of less than 20 percent.

3.2 Methods Used to Calculate Alternative Physicians Work GPCIs

3.2.1 Create County File of Wages for Occupation Categories

Census earnings data were obtained for metropolitan areas, counties, states, and the nonmetropolitan portions of states. Census uses several metropolitan area definitions. Metropolitan Statistical Area (MSA) is the most general term. Consolidated Metropolitan Statistical Areas (CMSA) are the largest, most populous MSAs. Primary Metropolitan Statistical Areas (PMSAs) are smaller metropolitan areas that are the constituents of CMSAs. In New England, MSAs are not county-based, so Census also defines New England County Metropolitan Areas (NECMAs). We began our analysis by creating two files of median earnings by occupation. The county is the unit of observation for both files, but, for most counties, earnings data is mapped onto counties from a higher geographic level (e.g., median metropolitan area earnings mapped onto all counties comprising the MSA). Counties cannot be used as the basis for creating the GPCI everywhere because sample sizes are too small to permit accurate estimation of earnings for each county. The two analytic files are:

1. A county level file with metropolitan area and statewide nonmetropolitan Census earnings by occupation. Outside of New England, metropolitan areas were defined as either Primary Metropolitan Statistical Areas (PMSAs) within Consolidated Metropolitan Areas (CMSA), or Metropolitan Statistical Areas (MSAs) outside of CMSAs. In New England, metropolitan area was defined as New England County Metropolitan Areas (NECMAs) rather than MSAs. Nonmetropolitan areas were defined as all counties in a state not located in an MSA or NECMA. For example, every county in Wyoming is included as an observation on this file. Counties in the Casper MSA (the only metropolitan area in Wyoming) are all assigned the Casper MSA median earnings. All other counties in the state are assigned Wyoming nonmetropolitan median earnings.

2. A county level file with county earnings for counties in CMSAs, metropolitan area earnings for counties in MSAs, but not in CMSAs, and statewide nonmetropolitan earnings for counties not in MSAs or CMSAs. Thus, this file is identical to that described in 1. above, except that PMSA earnings in CMSAs

TABLE 3-2

TWO DIGIT OCCUPATIONAL SHARES FOR THE PHYSICIAN WORK GPCI

Occupation Category	Share
Engineers	.181
Mathematical and computer scientists	.067
Natural scientists	.031
Social scientists, and urban planners	.028
Social, recreation, and religious workers	.050
Lawyers and judges	.103
Teachers, post-secondary	.049
Teachers, except post-secondary	.229
Vocational counselors	.013
Librarians	.009
Registered nurses	.114
Pharmacists, therapists	.039
Writers, artists	.062
Editors, reporters	.025

NOTE: Shares are based on national median hourly earnings multiplied by number of workers.

SOURCE: 1990 Census Special Tabulation

are replaced with county earnings. Census defines three CMSAs in New England--Boston, Hartford, and Providence--but they are not county based. Three NECMAs match the three New England CMSAs. For the purposes of creating this file, we treated the Boston, Massachusetts, Hartford, Connecticut, and Providence, Rhode Island NECMAs as CMSAs. That is, we used county earnings for counties within these three NECMAs.[3]

Both files described above contain earnings for each occupation, and for all stratifications (i.e., industry, education). Two parallel files were then created for mean rather than median earnings. All files also contain county population from the 1990 Census.

3.2.2 Calculate County Index

County indices were created using two different county weights: population and work relative value units (RVUs). To maintain comparability with the 1992 work GPCI, and because RVUs by county were unavailable when the work was originally done, alternative work GPCIs were explored using population weights. All GPCIs presented prior to Chapter 6, and in Appendices 1, 2, and 3 are population weighted. The final payment GPCIs (Chapter 6 and Appendix 5), however, are weighted by RVUs for the reasons discussed in Chapter 6. The choice of population or RVU weights has only a very small effect on the index values (Appendix 4). The same methods, described now, were used with either weight.

The population or RVU-weighted national average of the wages assigned to counties was taken for each professional specialty occupation group. Although they are included on the file, Puerto Rico, the Virgin Islands, and Guam were excluded from this national average, as they were in calculating the current (1980 Census based) physicians' work GPCI.[4] A county-level index was computed for each occupation by dividing each county's wage by the population or RVU-weighted national average. The overall county-level physician work index was then calculated by multiplying these occupation-specific indexes by the occupation cost shares from Table 3-1 or Table 3-2 and summing.

---

[3]In their June 1993 revision of metropolitan area definitions, Census/OMB defined only one CMSA in New England: Boston. Thus, for the final payment GPCIs (discussed in Chapter 6 and shown in Appendix 5), only the Boston NECMA was considered to be equivalent to a CMSA. Several towns in Connecticut, mostly in Fairfield county, are part of the New York City CMSA and also part of the New Haven-Bridgeport-Stamford-Danbury-Waterbury, Connecticut NECMA. We considered Fairfield county to be part of the NECMA, not the CMSA, for purposes of computing the final payment GPCIs.

[4]Whether or not Puerto Rico and other outlying areas are included in the national average does not affect the final payment index values because the values are rescaled to maintain budget neutrality (i.e., the same aggregate work payments to physicians).

3.2.3 Translate County Index to Medicare Payment Localities

Finally, the county index was translated to Medicare payment localities using a crosswalk. Locality indexes are population or RVU-weighted averages of their constituent county indexes. If a locality includes only part of a county, that county index is included in the locality average weighted by the population or RVUs of the county part. If a locality is entirely within one county, it is assigned that county's index.

3.2.4 Quarter Variation Work GPCI

Congress specified that the physician work GPCI should reflect one-quarter of the variation in physician work. We used the following formula to translate the "full variation" index of professional specialty earnings into the one-quarter variation index:

One-quarter variation GPCI = 1 + (Full Variation GPCI - 1)/4.

4.0 ALTERNATIVE PHYSICIAN WORK GPCIs

This chapter presents five alternatives for updating the 1992 physician work GPCI, which is based on 1980 Census median hourly earnings of professionals. These alternatives are:

(1) 1990 Census earnings for professionals of all education levels;
(2) 1990 Census earnings for professionals with advanced degrees only;
(3) 1990 Census data with county-specific earnings for counties in Consolidated Metropolitan Statistical Areas (CMSAs);
(4) 1990 Census earnings for 2-digit professional occupations rather than 1-digit professional occupations; and
(5) 1990 Census mean hourly earnings rather than median hourly earnings.

The next four subsections--Sections 4.1 through 4.5--describe the rationale for each of these alternatives, and then identify which Medicare payment localities' physician work GPCIs change the most as a result of changing the method of computation. We present both the full and the quarter work GPCIs. The quarter work index would be the basis for payment. The full work index shows the actual variation in professional earnings.

4.1 All Education Sample

We begin our comparisons of alternative GPCIs by comparing the 1992 (1980 Census) GPCI to an updated GPCI based on the 1990 Census all education sample of professionals. Changes in full work locality GPCIs from updating are significant. Table 4-1 shows that 69 localities, or nearly 30 percent of all localities, experience a change of more than six percentage points in the full work GPCI from updating to the 1990 data. Twenty five localities experience a gain of more than six percentage points. The three localities experiencing the largest gains are Northwest and North Central Connecticut (17.5 percentage points), South Central Connecticut (14.4 percentage points), and Eastern Connecticut (13.8 percentage points). Seven of the 9 localities experiencing the largest increases are located in New England.

Forty-four localities, or approximately 20 percent of all localities, experience a loss of more than six percentage points in the full variation physicians' work GPCI when updated with 1990 data. Two localities, Odessa, Texas, and Alaska lose more than 13 percentage points. Ten localities, five of which are in Illinois, lose between 10 and 13 percentage points. The changes in the quarter work (payment) GPCI are much smaller. No payment locality gains or loses as much as 5 percentage points.

4.2 Advanced Degree Sample

The 1992 physician work GPCI was constructed using the earnings of professional workers with at least 5 years of college. The purpose of the education adjustment was to restrict professionals to those whose preferences are expected to be similar to physicians'. Since physicians have extensive graduate training, it might be desirable to base the work GPCI on a group with similar education attainment. However, with the 1980 Census data, a work GPCI based on the advanced education sample was found to differ little from the all-education sample GPCI (Welch, Zuckerman, and Pope, 1989).

We acquired 1990 Census data by occupation for two education samples: workers with all education levels, and workers with an advanced degree (masters, doctorate, J.D., etc.). Thus, neither sample is exactly comparable to the 5 years of college sample used previously to construct the GPCI with 1980 Census data (that sample is no longer available). The advanced degree sample contains workers who are more similar to physicians in educational attainment, but its smaller sample sizes raises concerns that earnings may reflect

TABLE 4-1

LOCALITIES EXPERIENCING LARGE CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF UPDATING WITH 1990 CENSUS DATA[a]

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	Updated GPCI	1992 GPCI	Change	Updated GPCI	1992 GPCI	Change
Largest Increases							
NW AND N.CENTRAL CONN.	10230/01	1.046	1.002	0.044	1.183	1.008	0.175
SOUTH CENTRAL CONN.	10230/03	1.054	1.018	0.036	1.216	1.072	0.144
EASTERN CONN.	10230/04	1.034	0.999	0.035	1.134	0.996	0.138
ATLANTA, GA	01040/01	1.008	0.975	0.033	1.032	0.900	0.132
RICHMOND+CHARLOTTESVL, VA	10490/01	1.005	0.975	0.030	1.021	0.900	0.121
MASSACHUSETTS URBAN	00700/01	1.032	1.002	0.030	1.128	1.008	0.120
VERMONT	00780/50	0.970	0.942	0.028	0.881	0.768	0.113
NEW HAMPSHIRE	00780/40	0.990	0.962	0.028	0.958	0.848	0.110
MASS.SUBURBS/RURAL(CITIES)	00700/02	1.021	0.997	0.024	1.083	0.988	0.095
SAN FRANCISCO, CA	00542/05	1.059	1.038	0.021	1.237	1.152	0.085
SAN MATEO, CA	00542/06	1.059	1.038	0.021	1.237	1.152	0.085
TIDEWATER+N. VA COUNTIES	10490/02	1.009	0.989	0.020	1.038	0.956	0.082
QUEENS, NY	14330/04	1.079	1.059	0.020	1.316	1.236	0.080
MANHATTAN, NY	00803/01	1.079	1.059	0.020	1.316	1.236	0.080
AUSTIN, TX	00900/31	0.989	0.969	0.020	0.955	0.876	0.079
SOUTHERN MAINE	21200/03	0.975	0.956	0.019	0.902	0.824	0.078
NYC SUBURBS/LONG I., NY	00803/02	1.079	1.060	0.019	1.316	1.240	0.076
SMALL GA CITIES 02	01040/02	0.981	0.962	0.019	0.924	0.848	0.076
CENTRAL MAINE	21200/02	0.961	0.942	0.019	0.844	0.768	0.076
NORTHERN NEW JERSEY	00860/01	1.058	1.040	0.018	1.233	1.160	0.073
W. CENTR (LAKE PLAINS), OH	16360/00	0.987	0.969	0.018	0.947	0.876	0.071
MC ALLEN, TX	00900/19	0.961	0.945	0.016	0.845	0.780	0.065
NORTHERN MAINE	21200/01	0.963	0.947	0.016	0.852	0.788	0.064
SANTA CLARA, CA	00542/09	1.064	1.048	0.016	1.256	1.192	0.064
MARION + SURR. CNTYS., OH	16360/00	0.987	0.971	0.016	0.947	0.884	0.063
Largest Decreases							
ODESSA, TX	00900/13	0.960	1.008	-0.048	0.842	1.032	-0.190
ALASKA	01020/01	1.060	1.106	-0.046	1.242	1.424	-0.182
MINNESOTA STATEWIDE	00720/00	0.967	0.999	-0.032	0.867	0.996	-0.129
BRAZORIA, TX	00900/09	0.993	1.025	-0.032	0.972	1.100	-0.128
PEORIA, IL	00621/05	0.979	1.009	-0.030	0.914	1.036	-0.122
SHREVEPORT, LA	00528/02	0.974	1.003	-0.029	0.895	1.012	-0.117
ALEXANDRIA, LA	00528/07	0.958	0.985	-0.027	0.833	0.940	-0.107
SOUTHERN IL	00621/14	0.948	0.974	-0.026	0.790	0.896	-0.106
QUINCY, IL	00621/07	0.948	0.974	-0.026	0.790	0.896	-0.106

TABLE 4-1(continued)

LOCALITIES EXPERIENCING LARGE CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF UPDATING WITH 1990 CENSUS DATA[a]

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	Updated GPCI	1992 GPCI	Change	Updated GPCI	1992 GPCI	Change
SOUTHEAST, IL	00621/13	0.948	0.974	-0.026	0.790	0.896	-0.106
NORTHWEST, IL	00621/01	0.948	0.974	-0.026	0.790	0.896	-0.106
NORTHWEST IOWA	00640/06	0.943	0.969	-0.026	0.774	0.876	-0.102
BROWNSVILLE, TX	00900/10	0.955	0.980	-0.025	0.822	0.920	-0.098
CLEVELAND, OH	16360/00	0.987	1.011	-0.024	0.947	1.044	-0.097
ROCK ISLAND, IL	00621/04	0.972	0.995	-0.023	0.888	0.980	-0.092
DECATUR, IL	00621/11	0.958	0.981	-0.023	0.833	0.924	-0.091
W + SE WA (EXCL SEATTLE)	00932/01	0.985	1.008	-0.023	0.941	1.032	-0.091
EL PASO, TX	00900/14	0.973	0.995	-0.022	0.890	0.980	-0.090
DE KALB, IL	00621/03	0.956	0.978	-0.022	0.823	0.912	-0.089
S.CEN. IA(EXCL DES MOINES)	00640/04	0.940	0.962	-0.022	0.761	0.848	-0.087
SOUTH DAKOTA	00820/02	0.930	0.951	-0.021	0.718	0.804	-0.086
WYOMING	00825/21	0.967	0.988	-0.021	0.867	0.952	-0.085
MONROE, LA	00528/05	0.958	0.979	-0.021	0.832	0.916	-0.084
NORTH DAKOTA	00820/01	0.945	0.965	-0.020	0.780	0.860	-0.080
MIAMI, FL	00590/04	1.015	1.034	-0.019	1.061	1 136	-0.075
CHICAGO, IL	00621/16	1.026	1.044	-0.018	1.102	1.176	-0.074
MONTANA	00751/01	0.949	0.967	-0.018	0.795	0.868	-0.073
LAS VEGAS,ET AL(CITIES),NV	01290/01	1.018	1.036	-0.018	1.071	1.144	-0.073
NORTH CENTRAL IOWA	00640/03	0.953	0.971	-0.018	0.812	0.884	-0.072
MIDLAND, TX	00900/23	1.005	1.023	-0.018	1.021	1.092	-0.071
WICHITA FALLS, TX	00900/34	0.951	0.969	-0.018	0.806	0.876	-0.070
SPRINGFIELD, OH	16360/00	0.987	1.004	-0.017	0.947	1.016	-0.069
MERCED/SURR. CNTYS, CA	00542/10	1.001	1.018	-0.017	1.003	1.072	-0.069
SOUTHWEST IOWA	00640/07	0.951	0.968	-0.017	0.804	0.872	-0.068
WHEELING, WV	16510/17	0.958	0.975	-0.017	0.832	0.900	-0.068
STOCKTON/SURR. CNTYS, CA	00542/08	1.002	1.019	-0.017	1.008	1.076	-0.068
DETROIT, MI	00710/01	1.042	1.059	-0.017	1.168	1.236	-0.068
SE IOWA (INCL IOWA CITY)	00640/01	0.959	0.976	-0.017	0.837	0.904	-0.067
DES MOINES(POLK/WARREN),IA	00640/05	0.980	0.997	-0.017	0.921	0.988	-0.067
NE RURAL CA	00542/02	0.984	1.001	-0.017	0.937	1.004	-0.067
UTAH	00910/09	0.976	0.993	-0.017	0.906	0.972	-0.066
KANKAKEE, IL	00621/06	0.956	0.972	-0.016	0.825	0.888	-0.063
MONTEREY/SANTA CRUZ, CA	00542/12	1.008	1.023	-0.015	1.030	1.092	-0.062
WACO, TX	00900/22	0.966	0.981	-0.015	0.863	0.924	-0.061

[a]More than a six percentage point gain or loss in the full-work GPCI.

NOTE: 1992 GPCI is 5 or more years of college, 1-digit occupations, MSA earnings, 1980 Census data. Updated GPCI is all education levels, 1-digit occupations, MSA earnings, 1990 Census data.

random error rather than true wage differentials. The sample size analysis in Chapter 2 showed that the advanced degree sample is quite small for a sizeable portion of Medicare localities for some professional occupations.

To determine the effects of the advanced degree restriction, Table 4-2 shows localities with a large difference between the all education GPCI (option 1 above) and the advanced degree GPCI. As expected, the changes are the greatest in less populous localities, which are the most sensitive to random sampling variation. For example, the Grayson, Texas locality experiences the largest change from using the advanced degree rather than the all education sample, 41 percentage points in the full work GPCI and 10 percentage points in the quarter work GPCI. Grayson's advanced degree GPCI is implausible; it exceeds the GPCIs of San Francisco, Oakland, urban Massachusetts, and nearly equals the Los Angeles GPCI.

Table 4-2 shows that five other localities experiences gains of 8 or more percentage points in the full variation GPCI. Three of these--Victoria, Texas, McAllen, Texas, Wichita Falls, Texas--are also very small localities. Another twenty two localities experience gains of between four and eight percentage points. Sixteen localities lose more than 4 percentage points in the full variation GPCI as a result of using the advanced degree sample. The largest losses are 6 percentage points for Oakland/Berkeley, California and for Hawaii. Other large losers include both areas that would be expected to have relatively high proportions of individuals with advanced degrees (Marin and San Francisco, California, Urban Massachusetts, Charlottesville, Virginia) and small city localities (Waco and Temple, Texas). Changes in the quarter work GPCI are minor. With the exception of Grayson and Victoria Texas, no locality's quarter work GPCI differs by more than 2.5 percentage points between the advanced degree and all education samples.

In sum, we favor the all-education GPCI because the small advanced degree samples seem to create an undesirable amount of randomness in the work GPCI. This represents a change in methods from the current GPCI, but the 5 or more years of college sample is not available from the 1990 Census, so some change in methods is necessary. Moreover, previous analyses with 1980 Census data showed that the 5 years of college and all education work GPCIs did not differ significantly, and with the 1990 Census data, the advanced degree and all education quarter work GPCIs show only minor differences.

TABLE 4-2

LOCALITIES EXPERIENCING LARGE CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF USING EARNINGS OF PROFESSIONALS WITH ADVANCED DEGREES[a]

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	Advanced Degree Sample	All Education Sample	Change	Advanced Degree Sample	All Education Sample	Change
Largest Increases							
GRAYSON, TX	00900/16	1.061	0.959	0.102	1.243	0.836	0.407
VICTORIA, TX	00900/32	1.029	0.983	0.046	1.117	0.934	0.184
ANAHEIM/SANTA ANA, CA	02050/26	1.061	1.038	0.023	1.243	1.150	0.093
MC ALLEN, TX	00900/19	0.984	0.961	0.023	0.936	0.845	0.092
WICHITA FALLS, TX	00900/34	0.972	0.951	0.021	0.889	0.806	0.083
KINGS/TULARE, CA	00542/13	1.008	0.988	0.020	1.032	0.952	0.080
NE RURAL, CA	00542/02	1.002	0.984	0.018	1.008	0.937	0.071
TEXARKANA, TX	00900/08	0.972	0.955	0.016	0.887	0.821	0.066
EL PASO, TX	00900/14	0.989	0.973	0.016	0.956	0.890	0.065
LUBBOCK, TX	00900/21	0.970	0.955	0.016	0.881	0.818	0.063
MERCED/SURR.CNTYS, CA	00542/10	1.016	1.001	0.016	1.065	1.003	0.062
FRESNO/MADERA, CA	00542/11	1.015	1.000	0.014	1.059	1.002	0.057
LOS ANGELES (1ST OF 8)	02050/18	1.071	1.057	0.014	1.283	1.227	0.056
LOS ANGELES (2ND OF 8)	02050/19	1.071	1.057	0.014	1.283	1.227	0.056
LOS ANGELES (3RD OF 8)	02050/20	1.071	1.057	0.014	1.283	1.227	0.056
LOS ANGELES (4TH OF 8)	02050/21	1.071	1.057	0.014	1.283	1.227	0.056
LOS ANGELES (5TH OF 8)	02050/22	1.071	1.057	0.014	1.283	1.227	0.056
LOS ANGELES (6TH OF 8)	02050/23	1.071	1.057	0.014	1.283	1.227	0.056
LOS ANGELES (7TH OF 8)	02050/24	1.071	1.057	0.014	1.283	1.227	0.056
LOS ANGELES (8TH OF 8)	02050/25	1.071	1.057	0.014	1.283	1.227	0.056
PUERTO RICO	00973/20	0.895	0.881	0.014	0.578	0.523	0.055
WAUSAU (N CNTRL), WI	00951/36	0.976	0.963	0.014	0.905	0.850	0.055
ALEXANDRIA, LA	00528/07	0.972	0.958	0.014	0.888	0.833	0.055
VIRGIN ISLANDS	00973/50	0.980	0.966	0.013	0.918	0.865	0.053
SAN DIEGO/IMPERIAL, CA	02050/28	1.031	1.018	0.013	1.123	1.070	0.052
KANKAKEE, IL	00621/06	0.969	0.956	0.013	0.876	0.825	0.052
LAFAYETTE, LA	00528/06	0.986	0.975	0.012	0.946	0.898	0.047
VENTURA, CA	02050/17	1.040	1.029	0.012	1.161	1.114	0.047
LONGVIEW, TX	00900/17	0.985	0.974	0.011	0.941	0.897	0.045
RENO, ET AL. (CITIES), NV	01290/02	1.008	0.997	0.011	1.032	0.988	0.044
PHOENIX, AZ	01030/01	1.016	1.005	0.011	1.064	1.020	0.044
STOCKTON/SURR. CNTYS , CA	00542/08	1.013	1.002	0.011	1.051	1.008	0.043

TABLE 4-2 (continued)

LOCALITIES EXPERIENCING LARGE CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF USING EARNINGS OF PROFESSIONALS WITH ADVANCED DEGREES[a]

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	Advanced Degree Sample	All Education Sample	Change	Advanced Degree Sample	All Education Sample	Change
Largest Decreases							
OAKLAND/BERKLEY, CA	00542/07	1.027	1.042	-0.015	1.108	1.168	-0.060
HAWAII	01120/01	0.981	0.996	-0.015	0.924	0.984	-0.060
MARIN/NAPA/SOLANO, CA	00542/03	1.012	1.026	-0.015	1.046	1.104	-0.058
VERMONT	00780/50	0.956	0.970	-0.014	0.825	0.881	-0.056
URBAN MASS	00700/01	1.019	1.032	-0.013	1.075	1.128	-0.053
CENTRAL MAINE	21200/02	0.949	0.961	-0.012	0.794	0.844	-0.049
WHEELING, WV	16510/17	0.946	0.958	-0.012	0.783	0.832	-0.049
PEORIA, IL	00621/05	0.967	0.979	-0.012	0.868	0.914	-0.047
SAN FRANCISCO, CA	00542/05	1.048	1.059	-0.011	1.191	1.237	-0.046
SAN MATEO, CA	00542/06	1.048	1.059	-0.011	1.191	1.237	-0.046
RICHMOND & C-VILLE, VA	10490/01	0.994	1.005	-0.011	0.977	1.021	-0.043
NORTHERN MAINE	21200/01	0.952	0.963	-0.011	0.809	0.852	-0.043
WACO, TX	00900/22	0.955	0.966	-0.011	0.821	0.863	-0.042
TEMPLE, TX	00900/06	0.957	0.968	-0.010	0.829	0.871	-0.042
REST OF PA	00865/04	0.963	0.974	-0.010	0.853	0.895	-0.042
MASS SUBURBS/RURAL CITIES	00700/02	1.011	1.021	-0.010	1.042	1.083	-0.041

[a]More than a four percentage point gain or loss in the full-work GPCI.

NOTE: 1-digit occupations, MSA earnings.

4.3 County Specific Earnings in CMSAs

The 1992 physician work GPCI, as well as the two updated options presented above, utilize metropolitan-wide median hourly earnings for each county within an MSA. In smaller metropolitan areas this is probably not a significant shortcoming because earnings are likely to be reasonably homogeneous across the entire metropolitan area. However, significant earnings variation may exist within larger metropolitan areas. The third alternative physician work GPCI establishes county-specific earnings for counties within the larger metropolitan areas, defined as Consolidated Metropolitan Statistical Areas, or CMSAs.

The most useful comparison for this option is the 1990 update without county-specific earnings (option 1 for updating). This comparison isolates the effects of using county-specific earnings. The largest differences by payment locality between the 1990 updated GPCI and the 1990 update with county-specific earnings displayed in Table 4-3.

As expected, localities comprised of core cities of large metropolitan areas are the gainers, while suburban ring localities are the losers. Manhattan, New York (6.9 percentage points), the Philadelphia/Pittsburgh, Pennsylvania Medical Schools locality (4.2 percentage points), and San Francisco, California (4.2 percentage points) are the largest winners, and the only localities to experience gains of more than four percentage points in their full work GPCIs. Denton, Texas experiences the largest loss, a fourteen percentage point decrease in the full variation physician GPCI, as a result of using the county-specific earnings. This locality is part of suburban Dallas, and we believe the change reflects actual earning differences, not random measurement error. The Queens, New York, Rockford, Illinois, and New York City Suburbs localities also experience losses greater than four percentage points in their full work GPCIs.

Overall, the changes with county-specific CMSA earnings are not large. Only 25 localities experience changes greater than one percentage point in their full work GPCIs. Only six localities' quarter work GPCIs change by more than one percentage point. Nevertheless, we believe that use of county-specific earnings within CMSAs is a justified means of reflecting higher central city input prices. We believe the method of computing the work GPCI should be modified to reflect these higher costs.

TABLE 4-3

LOCALITIES EXPERIENCING THE LARGEST CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF USING COUNTY-SPECIFIC EARNINGS IN CMSAs[a]

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	CMSA/ County GPCI	MSA Data	Change	CMSA/ County GPCI	MSA Data	Change
Largest Increases							
MANHATTAN, NY	00803/01	1.096	1.079	0.017	1.386	1.316	0.069
PHILLY/PITT MED SHCLS/HOSPS, PA	00865/01	1.032	1.021	0.011	1.127	1.085	0.042
SAN FRANCISCO, CA	00542/05	1.070	1.059	0.010	1.278	1.237	0.042
DALLAS, TX	00900/11	1.013	1.004	0.008	1.051	1.017	0.034
MILWAUKEE, WI	00951/04	1.002	0.996	0.006	1.008	0.985	0.023
DETROIT, MI	00710/01	1.047	1.042	0.005	1.188	1.168	0.020
HOUSTON, TX	00900/18	1.022	1.017	0.005	1.088	1.069	0.019
CHICAGO, IL	00621/16	1.029	1.026	0.004	1.117	1.102	0.015
DELAWARE	00570/01	1.021	1.018	0.003	1.084	1.071	0.013
FORT WORTH, TX	00900/28	0.989	0.986	0.003	0.958	0.946	0.012
Largest Decreases							
DENTON, TX	00900/12	0.969	1.004	-0.035	0.876	1.017	-0.141
QUEENS, NY	14330/04	1.059	1.079	-0.020	1.237	1.316	-0.079
ROCKFORD, IL	00621/02	0.981	0.997	-0.016	0.924	0.987	-0.063
NYC SUBURBS/LONG I., NY	00803/02	1.066	1.079	-0.013	1.263	1.316	-0.054
MARIN/NAPA/SOLANO, CA	00542/03	1.016	1.026	-0.010	1.066	1.104	-0.039
SAN MATEO, CA	00542/06	1.050	1.059	-0.009	1.200	1.237	-0.037
NORTHEAST RURAL TX	00900/02	0.964	0.972	-0.008	0.855	0.888	-0.034
MILWAUKEE SURBURBS (SE), WI	00951/46	0.989	0.997	-0.008	0.955	0.988	-0.033
SOUTHEAST RURAL TX	00900/03	0.969	0.975	-0.006	0.874	0.899	-0.025
SM CITIES (CITY LIMITS) KY	00660/02	0.963	0.969	-0.006	0.854	0.877	-0.023
SOUTH & E. SHORE MD	00690/03	1.006	1.010	-0.004	1.023	1.040	-0.017
SUBURBAN CHICAGO, IL	00621/15	1.007	1.011	-0.004	1.030	1.046	-0.016
LG PA CITIES	00865/02	1.007	1.010	-0.003	1.027	1.040	-0.013
MIDDLE NJ	00860/02	1.034	1.038	-0.003	1.138	1.150	-0.012
MICHIGAN, NOT DETROIT	00710/02	0.996	0.999	-0.003	0.983	0.995	-0.012

[a]More than a one percentage point gain or loss in the full-variation GPCI.

NOTE: All education sample of professionals, 1-digit occupations.

4.4 Two Digit Occupations

The 1992 physicians' work GPCI, as well as the alternatives presented above, all rely on wages for six one-digit professional specialty occupations. The advantage of the one-digit occupations is that the broader occupational categories have larger sample sizes than the more narrowly defined two-digit occupations, reducing random noise in the GPCI. The disadvantage of the one-digit categories is that some include occupations with dissimilar earnings levels. For example, a one-digit occupation category includes social scientists, urban planners, social, recreation and religious workers, and lawyers and judges. Lawyers and judges earn much more than social, recreation, and religious workers, on average. If some localities have a higher proportion of lawyers, the GPCI will be inappropriately high there. The two digit occupations permit a more refined occupation mix adjustment, separating, for example, lawyers and judges from social, recreation, and religious workers. See Table 2-1 for a list of the six one-digit and 14 two-digit occupations and their sample size distributions by Medicare payment locality.

Table 4-4 shows localities experiencing the largest changes in the physicians' work GPCI as a result of using two digit occupations rather than one digit occupation categories. As might be expected, the localities with the largest gains from the use of two-digit occupations are predominantly small city or rural, while those experiencing large loses are highly urbanized. Washington, DC and suburbs, San Francisco, Miami, the New York City area, and Los Angeles are among the largest losers. The largest gainers include small localities in Texas and Illinois. Presumably the larger urban areas have higher-earning occupation mixes, while the small city/rural localities have lower-earning occupation mixes. Thus, a more refined two-digit occupation adjustment benefits the less populous localities at the expense of the highly urbanized areas.

The finer two-digit occupation mix adjustment makes sense. Nevertheless, it may introduce more random variation into the work GPCI in addition to improving the occupation mix adjustment. Table 2-1 shows that some localities have very small two-digit sample sizes. Also, the changes in the work GPCI from using two-digit occupations are not very large. Only two localities gain more than 5 percentage points, and only three lose more than 5 percentage points in the full variation GPCI. No locality gains or loses as much as two percentage points in its quarter work GPCI. We prefer to continue to use the more stable one-digit earnings in the work GPCI.

TABLE 4-4

LOCALITIES EXPERIENCING THE LARGEST CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF USING 2-DIGIT PROFESSIONAL OCCUPATIONS[a]

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	Two-Digit GPCI	One-Digit GPCI	Change	Two-Digit GPCI	One-Digit GPCI	Change
Largest Increases							
VICTORIA, TX	00900/32	1.002	0.983	0.019	1.009	0.934	0.076
MONROE, LA	00528/05	0.972	0.958	0.014	0.887	0.832	0.054
WICHITA FALLS, TX	00900/34	0.963	0.951	0.012	0.854	0.806	0.048
TEXARKANA, TX	00900/08	0.967	0.955	0.012	0.867	0.821	0.046
SAN ANGELO, TX	00900/30	0.959	0.948	0.011	0.835	0.791	0.043
DECATUR, IL	00621/11	0.968	0.958	0.010	0.872	0.833	0.039
QUINCY, IL	00621/07	0.956	0.948	0.009	0.826	0.790	0.035
SOUTHERN IL	00621/14	0.956	0.948	0.009	0.826	0.790	0.035
NORTHWEST, IL	00621/01	0.956	0.948	0.009	0.826	0.790	0.035
SOUTHEAST IL	00621/13	0.956	0.948	0.009	0.826	0.790	0.035
LONGVIEW, TX	00900/17	0.982	0.974	0.008	0.928	0.897	0.032
REST OF LA	00528/50	0.970	0.962	0.008	0.878	0.848	0.030
DE KALB, IL	00621/03	0.963	0.956	0.007	0.853	0.823	0.030
REST OF IN	00630/03	0.980	0.972	0.007	0.919	0.890	0.030
REST OF PA	00865/04	0.981	0.974	0.007	0.923	0.895	0.029
GRAYSON, TX	00900/16	0.966	0.959	0.007	0.865	0.836	0.028
KINGS/TULARE, CA	00542/13	0.995	0.988	0.007	0.981	0.952	0.028
MERCED/SURR.CNTYS, CA	00542/10	1.008	1.001	0.007	1.031	1.003	0.028
PEORIA, IL	00621/05	0.986	0.979	0.007	0.942	0.914	0.028
ST JOSEPH, MO	00740/01	0.959	0.953	0.007	0.837	0.811	0.026
S CNTRL IA (EXCL. DES MOINES)	00640/04	0.947	0.940	0.006	0.787	0.761	0.026
REST OF FLORIDA	00590/01	0.973	0.966	0.006	0.892	0.866	0.026
MC ALLEN, TX	00900/19	0.968	0.961	0.006	0.870	0.845	0.026
BROWNSVILLE, TX	00900/10	0.962	0.955	0.006	0.846	0.822	0.025
CORPUS CHRISTI, TX	00900/24	0.989	0.983	0.006	0.956	0.931	0.025
FORT WORTH, TX	00900/28	0.993	0.986	0.006	0.970	0.946	0.025
REST OF MO	11260/03	0.949	0.943	0.006	0.796	0.772	0.023
ALEXANDRIA, LA	00528/07	0.964	0.958	0.006	0.856	0.833	0.023
REST OF AL	00510/06	0.975	0.970	0.006	0.902	0.879	0.023
SW OR CITIES (CITY LIMITS)	01380/12	0.973	0.967	0.006	0.892	0.870	0.023
NORTHEAST IOWA	00640/02	0.964	0.958	0.006	0.854	0.832	0.022
NORTH IDAHO	05130/12	0.961	0.955	0.006	0.843	0.821	0.022
YUMA, AZ	01030/08	0.990	0.984	0.006	0.960	0.938	0.022
OSHKOSH (E CNTRL), WI	00951/60	0.977	0.972	0.005	0.909	0.888	0.021
NORTH CENTRAL, AL	00510/02	0.976	0.971	0.005	0.903	0.882	0.021
SOTH DAKOTA	00820/02	0.935	0.930	0.005	0.739	0.718	0.021

TABLE 4-4

LOCALITIES EXPERIENCING THE LARGEST CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF USING 2-DIGIT PROFESSIONAL OCCUPATIONS[a]

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	Two-Digit GPCI	One-Digit GPCI	Change	Two-Digit GPCI	One-Digit GPCI	Change
Largest Decreases							
DC +MD/VA SUBURBS	00580/01	1.042	1.057	-0.015	1.167	1.228	-0.061
SAN FRANCISCO, CA	00542/05	1.045	1.059	-0.014	1.179	1.237	-0.057
SAN MATEO, CA	00542/06	1.045	1.059	-0.014	1.179	1.237	-0.057
SANTA CLARA, CA	00542/09	1.056	1.064	-0.008	1.224	1.256	-0.032
MIAMI, FL	00590/04	1.008	1.015	-0.007	1.033	1.061	-0.027
NEW ORLEANS, LA	00528/01	0.992	0.998	-0.007	0.966	0.993	-0.026
AUSTIN, TX	00900/31	0.982	0.989	-0.006	0.929	0.955	-0.026
NYC SUBURBS/LONG I., NY	00803/02	1.073	1.079	-0.006	1.292	1.316	-0.025
NW AND N. CNTRL CT	10230/01	1.040	1.046	-0.006	1.160	1.183	-0.024
MIDLAND, TX	00900/23	0.999	1.005	-0.006	0.997	1.021	-0.023
MANHATTAN, NY	00803/01	1.073	1.079	-0.006	1.293	1.316	-0.023
QUEENS, NY	14330/04	1.073	1.079	-0.006	1.293	1.316	-0.023
SW CT	10230/02	1.060	1.066	-0.006	1.241	1.263	-0.022
LOS ANGELES (1ST OF 8)	02050/18	1.051	1.057	-0.005	1.205	1.227	-0.021
LOS ANGELES (2ND OF 8)	02050/19	1.051	1.057	-0.005	1.205	1.227	-0.021
LOS ANGELES (3RD OF 8)	02050/20	1.051	1.057	-0.005	1.205	1.227	-0.021
LOS ANGELES (4TH OF 8)	02050/21	1.051	1.057	-0.005	1.205	1.227	-0.021
LOS ANGELES (5TH OF 8)	02050/22	1.051	1.057	-0.005	1.205	1.227	-0.021
LOS ANGELES (6TH OF 8)	02050/23	1.051	1.057	-0.005	1.205	1.227	-0.021
LOS ANGELES (7TH OF 8)	02050/24	1.051	1.057	-0.005	1.205	1.227	-0.021
LOS ANGELES (8TH OF 8)	02050/25	1.051	1.057	-0.005	1.205	1.227	-0.021

[a]More than a two percentage point gain or loss in the full-variation GPCI.

NOTE: All education sample of professionals, MSA earnings.

4.5 Mean Earnings Instead of Median Earnings

Our first four GPCI alternatives are based on median hourly earnings, as is the 1992 physician work GPCI computed from 1980 Census data. An important advantage of median earnings is that they are less sensitive to the extremes of the earnings distribution. Hence, medians are less likely to be affected by anomalous, "outlier" reported wages than are means. Especially with small samples, as occurs in some of the less populous localities, median earnings are likely to be more stable and have a lower standard error than mean earnings. In addition, medians are a better measure of earnings of the "typical" employee than are means. Mean earnings could reflect, for example, a skewed distribution at upper earnings levels due to a few high-earnings individuals. Unusual extremes of the earnings distribution should not be reflected in the GPCI.

The one advantage of mean earnings is that they can be consistently aggregated to different geographic levels. For example, state-wide mean earnings are a weighted average of individual payment locality mean earnings. Median earnings do not have this property: the state-wide median is not a weighted average of the individual locality medians. Mean earnings can therefore be scaled consistently from the county level to the state level. This could be an advantage if the geographic area for physician payment are modified, as recommended, for example, by the Physician Payment Review Commission (PPRC, 1992).

Table 4-5 presents localities experiencing changes of more than three percentage points in the full-variation physician work GPCI as a result of using mean rather than median earnings. Eleven localities experience gains of more than 10 percentage points in the full work GPCI from using means: Victoria, Texas, Grayson, Texas, Manhattan, New York, and the eight Los Angeles, California localities. Another 19 localities gain between three and 10 percentage points; many of these are large city localities. The large gains of the two small Texas localities are probably an artifact of small sample sizes, for example, a few high-earning professionals. Manhattan and Los Angeles probably gain because of the presence of a larger proportion of very high earning individuals in some of the professional occupations. For example, a large number of very high earning corporate lawyers work in New York, while Los Angeles is the workplace of a disproportionately large number of very high earning artists and entertainers. The other large cities that gain probably similarly have a disproportionate number of very high-earning professionals.

Twenty five localities experience losses of more than 3 percentage points in the full work GPCI as a result of using mean earnings data. The losers are predominantly small

TABLE 4-5

LOCALITIES EXPERIENCING LARGE CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF USING MEAN RATHER THAN MEDIAN EARNINGS[a]

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	Means GPCI	Median GPCI	Change	Means GPCI	Median GPCI	Change
Largest Increases							
VICTORIA, TX	00900/32	1.044	0.984	0.060	1.176	0.937	0.239
GRAYSON, TX	00900/16	1.001	0.960	0.041	1.003	0.839	0.164
MANHATTAN, NY	00803/01	1.128	1.097	0.031	1.511	1.386	0.125
LOS ANGELES (1ST OF 8)	02050/18	1.084	1.058	0.027	1.338	1.232	0.106
LOS ANGELES (2ND OF 8)	02050/19	1.084	1.058	0.027	1.338	1.232	0.106
LOS ANGELES (3RD OF 8)	02050/20	1.084	1.058	0.027	1.338	1.232	0.106
LOS ANGELES (4TH OF 8)	02050/21	1.084	1.058	0.027	1.338	1.232	0.106
LOS ANGELES (5TH OF 8)	02050/22	1.084	1.058	0.027	1.338	1.232	0.106
LOS ANGELES (6TH OF 8)	02050/23	1.084	1.058	0.027	1.338	1.232	0.106
LOS ANGELES (7TH OF 8)	02050/24	1.084	1.058	0.027	1.338	1.232	0.106
LOS ANGELES (8TH OF 8)	02050/25	1.084	1.058	0.027	1.338	1.232	0.106
VIRGIN ISLANDS	00973/50	0.985	0.967	0.018	0.941	0.868	0.072
MIAMI, FL	00590/04	1.033	1.016	0.017	1.132	1.065	0.068
HOUSTON, TX	00900/18	1.037	1.022	0.015	1.148	1.088	0.060
ANAHEIM/SANTA ANA, CA	02050/26	1.053	1.039	0.015	1.214	1.155	0.059
SAN FRANCISCO, CA	00542/05	1.081	1.070	0.011	1.324	1.279	0.045
CHICAGO, IL	00621/16	1.040	1.029	0.011	1.161	1.117	0.044
SANTA BARBERA, CA	02050/16	1.018	1.007	0.011	1.071	1.028	0.043
FORT LAUDERDALE, FL	00590/03	1.010	1.000	0.010	1.040	0.998	0.041
DALLAS, TX	00900/11	1.023	1.013	0.010	1.091	1.052	0.039
AUSTIN, TX	00900/31	0.999	0.990	0.010	0.998	0.959	0.038
LAREDO, TX	00900/33	0.967	0.958	0.010	0.868	0.830	0.038
BATON ROUGE, LA	00528/03	0.995	0.985	0.009	0.978	0.940	0.038
DELAWARE	00570/01	1.030	1.021	0.009	1.119	1.085	0.035
NEW ORLEANS, LA	00528/01	1.008	0.999	0.008	1.031	0.997	0.034
LAFAYETTE, LA	00528/06	0.984	0.975	0.008	0.935	0.902	0.034
PHILLY/PITT MED SHCLS/HOSPS, PA	00865/01	1.040	1.032	0.008	1.161	1.128	0.033
ORANGE, TX	00900/25	1.002	0.994	0.008	1.008	0.975	0.033
BEAUMONT, TX	00900/20	1.002	0.994	0.008	1.008	0.975	0.033
ATLANTA, GA	01040/01	1.017	1.009	0.008	1.069	1.036	0.032

TABLE 4-5 (continued)

LOCALITIES EXPERIENCING LARGE CHANGES IN THE PHYSICIAN WORK GPCI AS A RESULT OF USING MEAN RATHER THAN MEDIAN EARNINGS[a]

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	Means GPCI	Median GPCI	Change	Means GPCI	Median GPCI	Change
Largest Decreases							
TEMPLE, TX	00900/06	0.950	0.968	-0.018	0.802	0.874	-0.072
YUMA, AZ	01030/08	0.969	0.985	-0.016	0.876	0.941	-0.065
SW OR CITIES (CITY LIMITS)	01380/12	0.955	0.968	-0.013	0.821	0.873	-0.052
LACROSSE (W CNTRL), WI	00951/19	0.962	0.974	-0.012	0.848	0.895	-0.047
JANESVILLE (S CNTRL), WI	00951/54	0.954	0.965	-0.011	0.816	0.861	-0.045
QUEENS, NY	14330/04	1.048	1.059	-0.011	1.193	1.238	-0.045
NORTHWEST WI	00951/12	0.952	0.963	-0.011	0.809	0.853	-0.044
ALASKA	01020/01	1.051	1.062	-0.011	1.202	1.246	-0.044
OSHKOSH (E CNTRL), WI	00951/60	0.962	0.973	-0.010	0.849	0.891	-0.042
CENTRAL WI	00951/13	0.949	0.960	-0.010	0.798	0.839	-0.041
SOUTHWEST WI	00951/14	0.949	0.960	-0.010	0.798	0.839	-0.041
SAN BERNADINO/E.CTRL CNTYS CA	00542/15	1.007	1.016	-0.010	1.027	1.065	-0.039
DENTON, TX	00900/12	0.960	0.969	-0.009	0.840	0.877	-0.037
REST OF OREGON	01380/99	0.962	0.971	-0.009	0.847	0.884	-0.036
MADISON (DANE CNTY), WI	00951/15	0.982	0.991	-0.009	0.927	0.963	-0.036
STOCKTON/SURR. CNTYS , CA	00542/08	0.994	1.003	-0.009	0.976	1.011	-0.036
REST OF IN	00630/03	0.964	0.973	-0.009	0.856	0.891	-0.036
MASS SUBURBS/RURAL CITIES	00700/02	1.009	1.017	-0.009	1.035	1.069	-0.034
MINNESOTA (BLUE SHIELD)	00720/00	0.959	0.967	-0.009	0.836	0.870	-0.034
AMARILLO, TX	00900/26	0.967	0.976	-0.008	0.869	0.903	-0.034
MILWAUKEE SURBURBS (SE), WI	00951/46	0.981	0.989	-0.008	0.923	0.955	-0.032
NYC SUBURBS/LONG I., NY	00803/02	1.058	1.066	-0.008	1.231	1.263	-0.032
ST JOSEPH, MO	00740/01	0.945	0.953	-0.008	0.782	0.814	-0.032
BAKERSFIELD , CA	00542/14	1.017	1.025	-0.008	1.066	1.098	-0.032
W & SE WA (EXCL SEATTLE)	00932/01	0.977	0.984	-0.008	0.907	0.938	-0.031

[a]More than a three percentage point gain or loss in the full-variation GPCI.

NOTE: Both GPCIs utilize earnings of 1-digit occupations, all education sample, and county-specific data within CMSAs.

city/rural localities. The largest losers are Temple, Texas (7.2 percentage points), Yuma, Arizona (6.5 percentage points), and Southwest Oregon Cities (5.2 percentage points). These less populous areas lack the high earning professionals present in larger cities and therefore have relatively lower mean earnings than median earnings.

We prefer the medians-based index because of the lesser sensitivity of median earnings to the extremes of the earnings distribution. This reduces the susceptibility of the work GPCI to random fluctuations. The medians-based GPCI also measures typical earnings better than the means-based GPCI, which can be influenced by a small proportion of unusually high-earning professionals in an area. We believe that the GPCI should compare the earnings of similar workers in different areas.

5.0 COMPARISON OF PHYSICIAN WORK GPCI TO ALTERNATIVE EARNINGS INDEXES

Although we believe that the physician work GPCI is appropriately based on the relative earnings of professional workers, the 1990 Census data allow comparisons to relative earnings of other occupations. In this chapter, we compare the professional earnings index to indexes of earnings of all non-manufacturing workers and of physicians. All non-manufacturing workers provides a very broadly based wage comparison to the earnings of professionals. A similar broadly-based occupational group is used to update physician fees in the Medicare Economic Index. The comparison to physician earnings is relevant because the GPCI is used to adjust physician fees, and actual physician income is an alternative adjustor. Section 5.1 reviews the reasons why we believe that professional earnings is the appropriate choice for the physician work GPCI. Comparisons of relative professional earnings and the earnings of all non-manufacturing workers are presented in Section 5.2. Comparisons of relative earnings of physicians and other professionals by Medicare payment locality are contained in Section 5.3.

5.1 Conceptual Issues in the Choice of Physician Work GPCI

The conceptual justification for use of an index of relative professional earnings as the physician work GPCI was developed in Zuckerman, Welch, and Pope (1987), Welch, Zuckerman, and Pope (1989), Zuckerman, Welch, and Pope (1990), and Pope, et al (1989). Briefly, the physician work GPCI should compensate physicians for cost-of-living and

amenities variations across geographic areas. Since the GPCI is applied to physician fees per unit of service, it should be based on earnings per unit time, i.e., hourly earnings. With appropriate compensation for cost-of-living and amenities, real physician hourly income will be equal everywhere. That is, physicians will not have an incentive to choose one location over another. This is both equitable--real net incomes per unit service are equal--and efficient--the geographic distribution of physicians is not biased toward any area, given the level of demand for physician services.

Even with an appropriately constructed GPCI, the physician to population ratio will vary across areas because of higher demand for physician services in some areas than others. For example, lower-income areas may have fewer physicians. If policymakers wish to offset the effects of income levels and other factors on the distribution of physicians, they can do so through added payments or incentives. For example, physicians who locate in designated "shortage areas" can be paid bonuses. However, the basic physician work GPCI should be an unbiased measure of the relative hourly earnings necessary to make physicians indifferent between locating in different areas.

Both theory and empirical evidence suggest that wages (earnings) reflect both cost-of-living and amenity differences among areas (see the citations in Zuckerman, Welch, and Pope, 1987). A cost-of-living index alone is not adequate because it does not reflect amenity differences among areas. What hourly earnings should be used in the GPCI? A very broadly-based group--say, all workers--is not appropriate because the higher education and income level of physician may cause their tastes and cost-of-living to differ from workers as a whole. Professional workers are a more narrowly defined group whose education and income is more similar to physicians. They are a more appropriate proxy group to use in the physician work GPCI.

Why not use physician income itself in the GPCI? A major conceptual problem with using physician income in the GPCI arises from the fact that most physicians are self-employed. Thus, physician income has two components: an opportunity wage (cost) and an entrepreneurial return, or profit. The opportunity wage is what an employed physician on salary could earn, and, as foregone income, is the "cost" of being self-employed. The self-employed physician's profit is any net income in excess of the opportunity wage. The GPCI should reflect the opportunity wage, but not the profit. The entire Medicare Fee Schedule is based on the principle that fees should reflect costs, such as the opportunity wage, but not other factors, such as profits. Incorporating profit into the GPCI could create perverse incentives. For example, it is not appropriate to pay more per service to physicians in an

area that are especially entrepreneurial and provide more services. Similarly, if physicians in an area are increasing their volume of services faster than physicians in other areas, it is not appropriate to pay them more per service when the GPCI is updated. Even the wage of employed physicians may not be appropriate for the GPCI. It is influenced by the profit opportunities available to self-employed physicians in an area, and is thus not an unbiased measure of cost-of-living and amenity differences.

Using physician income would create a GPCI that is not an independent, exogenous measure of the relative cost of physician time. There is general consensus that the historical pattern of physician fees was distorted by insurance and other factors. Much influence of these historical fee structures persists today. It is not desirable to reflect biased historical physician fees and incomes in the GPCI. To be sure, many insurers are currently reforming their methods of physician payment. However, even when widespread fee reforms are implemented, it would not be appropriate to base the GPCI on physician incomes. Many of these reforms are based in whole or part on the Medicare Fee Schedule, including the GPCI. Basing the GPCI on the pattern of physician income would therefore create an undesirable circularity between physician incomes and the GPCI. An independent, exogenous measure of the relative cost of physician time, such as is provided by professional earnings, is needed. This principle of exogeneity has also been recognized in the Medicare Economic Index (MEI), which is used in updating Medicare physician fees. The appropriate rate of change for the physician income component of the MEI is not based on actual physician income, but on the earnings of all workers.

5.2 Comparison of Relative Professional Earnings to Relative Earnings of All Non-manufacturing Workers

Table 5-1 shows Medicare localities with large differences between median hourly earnings indexes of all non-manufacturing workers versus the physician work GPCI based on professional occupations only. Both quarter variation and full variation results are presented. We focus on the full variation results. It should also be noted that the wages of non-manufacturing workers are not adjusted for occupation mix differences across areas, whereas the professional earnings are adjusted for 1-digit occupation mix. Both indexes use county-specific data within large metropolitan areas.

Non-manufacturing wages tend to be relatively higher in large cities, whereas professional earnings are relatively higher in smaller cities and rural areas. For example, in

TABLE 5-1

LOCALITIES WITH LARGE DIFFERENCES BETWEEN THE PHYSICIANS' WORK GPCI AND WAGES OF ALL NONMANUFACTURING WORKERS (a)

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	Non-Manufact.	CMSA/County GPCI	Diff	Non-Manufact.	CMSA/County GPCI	Diff
Largest Increases							
MANHATTAN, NY	00803/01	1.146	1.096	0.050	1.585	1.386	0.200
SAN MATEO, CA	00542/06	1.094	1.050	0.044	1.378	1.200	0.178
SAN FRANCISCO, CA	00542/05	1.111	1.070	0.041	1.443	1.278	0.164
OAKLAND/BERKLEY, CA	00542/07	1.081	1.043	0.038	1.323	1.172	0.150
DC +MD/VA SUBURBS	00580/01	1.093	1.058	0.035	1.372	1.233	0.139
SEATTLE (KING CNTY), WA	00932/02	1.041	1.007	0.034	1.164	1.027	0.136
QUEENS, NY	14330/04	1.091	1.059	0.031	1.363	1.237	0.125
ALASKA	01020/01	1.091	1.061	0.030	1.365	1.246	0.120
URBAN MASS	00700/01	1.060	1.031	0.029	1.239	1.122	0.117
MARIN/NAPA/SOLANO, CA	00542/03	1.044	1.016	0.028	1.177	1.066	0.111
SW CT	10230/02	1.093	1.067	0.026	1.373	1.268	0.105
ATLANTA, GA	01040/01	1.032	1.009	0.023	1.128	1.036	0.092
CHICAGO, IL	00621/16	1.052	1.029	0.023	1.208	1.117	0.091
S. CNTRL CT	10230/03	1.078	1.055	0.023	1.311	1.220	0.091
PHILLY/PITT MED SHCL/HOSP, PA	00865/01	1.053	1.032	0.022	1.214	1.127	0.086
NORTHERN NJ	00860/01	1.079	1.058	0.021	1.318	1.232	0.085
SUBURBAN CHICAGO, IL	00621/15	1.028	1.007	0.021	1.112	1.030	0.083
SACRAMENTO/SURR. CNTYS, CA	00542/04	1.042	1.021	0.020	1.166	1.085	0.081
MASS SUBURBS/RURAL CITIES	00700/02	1.040	1.022	0.019	1.162	1.087	0.075
NW AND N. CNTRL CT	10230/01	1.066	1.047	0.019	1.262	1.187	0.075
Largest Decreases							
VICTORIA, TX	00900/32	0.944	0.984	-0.040	0.775	0.937	-0.161
MC ALLEN, TX	00900/19	0.925	0.962	-0.037	0.701	0.847	-0.147
BROWNSVILLE, TX	00900/10	0.922	0.956	-0.034	0.690	0.824	-0.134
LAREDO, TX	00900/33	0.924	0.957	-0.033	0.696	0.830	-0.133
BEAUMONT, TX	00900/20	0.963	0.994	-0.031	0.851	0.974	-0.123
ORANGE, TX	00900/25	0.963	0.994	-0.031	0.851	0.974	-0.123
CORPUS CHRISTI, TX	00900/24	0.955	0.984	-0.029	0.819	0.934	-0.116
EL PASO, TX	00900/14	0.945	0.973	-0.028	0.781	0.893	-0.112
LAFAYETTE, LA	00528/06	0.948	0.975	-0.027	0.793	0.901	-0.108
LONGVIEW, TX	00900/17	0.948	0.975	-0.026	0.794	0.899	-0.106
DETROIT, MI	00710/01	1.022	1.047	-0.025	1.088	1.188	-0.100

TABLE 5-1 (continued)

LOCALITIES WITH LARGE DIFFERENCES BETWEEN THE PHYSICIANS' WORK GPCI AND WAGES OF ALL NONMANUFACTURING WORKERS (a)

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	Non-Manufact.	CMSA/County GPCI	Diff	Non-Manufact.	CMSA/County GPCI	Diff
MICHIGAN, NOT DETROIT	00710/02	0.972	0.996	-0.024	0.887	0.983	-0.096
MIDLAND, TX	00900/23	0.982	1.006	-0.024	0.929	1.025	-0.096
MOBILE, AL	00510/04	0.952	0.975	-0.023	0.808	0.902	-0.094
LAKE CHARLES, LA	00528/04	0.953	0.975	-0.022	0.812	0.900	-0.088
BRAZORIA, TX	00900/09	0.972	0.994	-0.022	0.889	0.975	-0.086
REST OF IN	00630/03	0.951	0.973	-0.022	0.806	0.891	-0.085
WESTERN TX	00900/04	0.937	0.958	-0.021	0.749	0.834	-0.085
LAS VEGAS, ET AL. (CITIES), NV	01290/01	0.998	1.019	-0.021	0.992	1.075	-0.083
OSHKOSH (E CNTRL), WI	00951/60	0.952	0.973	-0.021	0.808	0.891	-0.083
REST OF LA	00528/50	0.943	0.963	-0.019	0.774	0.851	-0.077
JANESVILLE (S CNTRL), WI	00951/54	0.946	0.965	-0.019	0.784	0.861	-0.077
ALEXANDRIA, LA	00528/07	0.940	0.959	-0.019	0.760	0.836	-0.076
NEW ORLEANS, LA	00528/01	0.980	0.999	-0.019	0.921	0.997	-0.076
SOUTHWEST WI	00951/14	0.941	0.960	-0.019	0.765	0.839	-0.074
CENTRAL WI	00951/13	0.941	0.960	-0.019	0.765	0.839	-0.074
REST OF KENTUCKY	00660/03	0.945	0.963	-0.018	0.778	0.851	-0.073
WACO, TX	00900/22	0.948	0.966	-0.018	0.794	0.866	-0.072
REST OF AL	00510/06	0.953	0.970	-0.018	0.811	0.882	-0.071

(a) more than a seven percentage point change in the full-variation GPCI

GPCI: all education sample, one-digit occupations, county data within CMSAs

Manhattan, non-manufacturing wages are 59 percent above the national average whereas professional earnings are only 39 percent above the average. Conversely, in Victoria, Texas, professional earnings are 94 percent of the national average whereas non-manufacturing earnings are only 78 percent of the national average.

This pattern is probably due in part to the lack of occupation mix adjustments in the non-manufacturing wages. Large cities probably have a more skilled, and hence, higher wage occupation mix than small cities or rural areas. In addition, the pattern could reflect a greater preference of professionals to locate in the larger urban areas. That is, because of the non-pecuniary attractions of larger cities for professionals, they may need to be compensated less highly for the greater cost-of-living and other disamenities of an urban location.

The precise reasons for the differences shown in Table 5-1 cannot be uncovered without further analysis. However, the comparison does indicate that the use of professionals, and the occupation mix adjustment, in the GPCI are having their intended effects. A very broad occupational group, such as all non-manufacturing workers, would not be appropriate for the GPCI, especially if unadjusted for occupation mix differences among areas. Such a physician work GPCI would pay more than necessary to attract professionals, such as physicians, to large cities, while not paying enough to attract them to smaller cities and rural areas.

5.3 Comparison of Relative Professional Earnings to Relative Physician Earnings

5.3.1 Census Physician Earnings Data

We obtained two series of physician earnings data from the 1990 Census. The sample for the first is all physicians. The sample for the second is physicians cross-classified by the Census industry classification of "physicians' offices". The first series provides a larger sample size, but includes interns and residents. Since interns and residents earn much less than the average for other physicians, earnings of all physicians will tend to be lower in areas with extensive medical education programs, in particular, large cities. The second series excludes interns, residents, and other hospital-based physicians, but at the cost of a smaller sample size (see Table 2-1 for the sample size distribution of office-based physicians across localities). This series is especially prone to anomalous or inaccurate values in the less populous localities due to small sample sizes. Neither series has any controls for physician characteristics such as specialty, age, sex, foreign medical graduate, or degree of patient care versus administrative or research involvement. Thus, Census-reported physician earnings

may vary across areas because of variations in physician specialty or patient care versus research mix.

We also had series on physician earnings cross-classified by advanced degree status and for mean, rather than median hourly earnings. The advanced degree sample provides a useful check on status as a medical doctor because occupation is self-reported on the Census. The advanced degree sample was similar in size and earnings to the all-education sample. In addition, mean earnings patterns for physicians provide a useful check on median earnings patterns. Census uses an open-ended category at the highest earnings levels to calculate median hourly earnings. Physicians' income is so much greater than average that many physicians' hourly incomes must fall into the open-ended range. This could cause inaccuracies in the computation of median hourly incomes. However, comparison of mean and median physician earnings patterns did not reveal major differences. For our empirical comparisons, we used the all-education, median physician earnings series.

5.3.2 Results

The correlation between Census physician earnings and the physician work GPCI (full variation version) is low. For earnings of all physicians the correlation is .13; for earnings of office-based physicians, the correlation is .29. Tables 5-2 and 5-3 presents the comparison of professional earnings (the GPCI) and physician earnings indexes for Medicare payment localities. The all physicians earnings index is presented in Table 5-2 and the physicians in physicians' offices index is used in Table 5-3. We focus on the "full variation" columns.

Perhaps most striking in Table 5-2 is how low physician earnings in several large cities are relative to other professional earnings. The index of physician earnings in Manhattan, San Francisco, Washington DC, Chicago, Baltimore, urban Massachusetts (including Boston and Worcester), and Detroit range from 50 percentage points to 20 percentage points less than the index of professional earnings. These urban areas are characterized by the presence of large teaching hospitals and extensive medical education activity. The low physician earnings presumably result, at least in part, from the large numbers of lower-earning residents and interns in large urban centers.

Table 5-3 provides a test of this hypothesis because the physician sample is restricted to office-based physicians and should eliminate most interns/residents. As expected, relative earnings of office-based physicians are greater in large cities than relative earnings of all physicians. For example, Manhattan's physician earnings index rises from 0.899 to 1.201, and

TABLE 5-2

LOCALITIES WITH LARGE DIFFERENCES BETWEEN THE PHYSICIANS' WORK GPCI AND AND HOURLY EARNINGS OF PHYSICIANS (a)

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	MD-CMSA/ County	CMSA/County GPCI	Diff	MD-CMSA/ County	CMSA/County GPCI	Diff
Largest Increases							
SAN ANGELO, TX	00900/30	1.280	0.948	0.331	2.119	0.794	1.325
ROCKFORD, IL	00621/02	1.134	0.981	0.153	1.535	0.924	0.611
VICTORIA, TX	00900/32	1.129	0.984	0.145	1.516	0.937	0.579
AMARILLO, TX	00900/26	1.117	0.976	0.142	1.470	0.903	0.567
LAKE CHARLES, LA	00528/04	1.103	0.975	0.128	1.413	0.900	0.512
TYLER, TX	00900/27	1.088	0.972	0.116	1.350	0.887	0.464
WHEELING, WV	16510/17	1.074	0.959	0.116	1.296	0.834	0.462
MONROE, LA	00528/05	1.066	0.959	0.107	1.263	0.835	0.428
KANKAKEE, IL	00621/06	1.060	0.957	0.103	1.240	0.827	0.413
DENTON, TX	00900/12	1.070	0.969	0.101	1.282	0.876	0.406
TEXARKANA, TX	00900/08	1.049	0.956	0.093	1.194	0.824	0.370
BATON ROUGE, LA	00528/03	1.073	0.985	0.088	1.292	0.940	0.352
LAREDO, TX	00900/03	1.043	0.957	0.085	1.171	0.830	0.341
NORTH CENTRAL AL	00510/02	1.056	0.971	0.085	1.223	0.885	0.338
RIVERSIDE, CA	00542/27	1.096	1.012	0.084	1.386	1.050	0.336
ALEXANDRIA, LA	00528/07	1.043	0.959	0.084	1.171	0.836	0.335
LAS VEGAS, ET AL. (CITIES), NV	01290/01	1.097	1.019	0.079	1.390	1.075	0.315
NORTHEAST IOWA	00640/02	1.036	0.959	0.077	1.143	0.834	0.308
SM CITIES (CITY LIMITS) KY	00660/02	1.039	0.963	0.076	1.158	0.854	0.304
ABILENE, TX	00900/29	1.034	0.961	0.074	1.137	0.842	0.295
NORTHWEST, IL	00621/01	1.021	0.948	0.072	1.082	0.793	0.290
QUINCY, IL	00621/07	1.021	0.948	0.072	1.082	0.793	0.290
SOUTHEAST IL	00621/13	1.021	0.948	0.072	1.082	0.793	0.290
SOUTHERN IL	00621/14	1.021	0.948	0.072	1.082	0.793	0.290
CORPUS CHRISTI, TX	00900/24	1.056	0.984	0.072	1.223	0.934	0.289
NORTHWEST IOWA	00640/06	1.014	0.944	0.070	1.058	0.776	0.282
ORANGE, TX	00900/25	1.062	0.994	0.069	1.249	0.974	0.274
BEAUMONT, TX	00900/20	1.062	0.994	0.069	1.249	0.974	0.274
MC ALLEN, TX	00900/19	1.030	0.962	0.068	1.120	0.847	0.272
ARKANSAS	00520/13	1.015	0.951	0.064	1.060	0.805	0.255
EASTERN VALLEY, WV	16510/18	1.020	0.956	0.063	1.079	0.825	0.254
REST OF IN	00630/03	1.036	0.973	0.063	1.142	0.891	0.251
CHAMPAIGN-URBANA, IL	00621/10	1.015	0.953	0.062	1.060	0.812	0.249
OHIO RIVER VALLEY, WV	16510/19	1.018	0.957	0.061	1.071	0.829	0.243
VENTURA, CA	02050/17	1.090	1.030	0.061	1.361	1.118	0.243
DECATUR, CA	00621/11	1.019	0.959	0.060	1.076	0.835	0.241

TABLE 5-2 (continued)

LOCALITIES WITH LARGE DIFFERENCES BETWEEN THE PHYSICIANS' WORK GPCI AND AND HOURLY EARNINGS OF PHYSICIANS (a)

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	MD-CMSA/ County	CMSA/County GPCI	Diff	MD-CMSA/ County	CMSA/County GPCI	Diff
METROPOLITAN IN	00630/01	1.049	0.989	0.060	1.196	0.958	0.238
DE KALB, IL	00621/03	1.014	0.956	0.058	1.057	0.823	0.234
SALEM, ET AL. (CITIES) OR	01380/03	1.024	0.965	0.059	1.094	0.860	0.234
NE RURAL, CA	00542/02	1.043	0.985	0.058	1.174	0.940	0.234
OSHKOSH (E CNTRL), WI	00951/60	1.031	0.973	0.058	1.123	0.891	0.232
EUGENE, ET AL. (CITIES), OR	01380/02	1.017	0.960	0.057	1.068	0.839	0.229
REST OF KENTUCKY	00660/03	1.018	0.963	0.055	1.072	0.851	0.221
FORT WORTH, TX	00900/28	1.043	0.989	0.053	1.171	0.958	0.213
ODESSA, TX	00900/13	1.014	0.961	0.053	1.057	0.844	0.213
CHARLESTON, WV	16510/16	1.032	0.979	0.052	1.127	0.917	0.210
SMALL GA CITIES 03	01040/03	1.021	0.970	0.052	1.085	0.878	0.207
NORTHEAST RURAL TX	00900/02	1.015	0.964	0.051	1.060	0.855	0.205
REST OF MISSISSIPPI	10250/01	1.004	0.953	0.051	1.016	0.811	0.205
FORT LAUDERDALE, FL	00590/03	1.051	0.999	0.051	1.202	0.998	0.204
S CNTRL IA (EXCL. DES MOINES)	00640/04	0.991	0.941	0.050	0.964	0.764	0.201
Largest Decreases							
MANHATTAN, NY	00803/01	0.975	1.096	-0.122	0.899	1.386	-0.486
GALVESTON, TX	00900/15	0.875	0.990	-0.115	0.499	0.961	-0.462
SAN FRANCISCO, CA	00542/05	0.955	1.070	-0.114	0.822	1.278	-0.457
ALASKA	01020/01	0.979	1.061	-0.083	0.914	1.246	-0.331
PHILLY/PITT MED SHCL/HOSP, PA	00865/01	0.955	1.032	-0.077	0.821	1.127	-0.307
DC +MD/VA SUBURBS	00580/01	0.985	1.058	-0.073	0.940	1.233	-0.293
ELKO & ELY (CITIES), NV	01290/03	0.918	0.987	-0.069	0.672	0.950	-0.278
CHICAGO, IL	00621/16	0.962	1.029	-0.067	0.850	1.117	-0.267
NYC SUBURBS/LONG I., NY	00803/02	1.003	1.066	-0.063	1.011	1.263	-0.252
BALTIMORE/SURR. CNTYS, MD	00690/01	0.965	1.024	-0.058	0.862	1.095	-0.233
URBAN MASS	00700/01	0.975	1.033	-0.058	0.900	1.132	-0.232
VERMONT	00780/50	0.918	0.971	-0.053	0.671	0.884	-0.212
QUEENS, NY	14330/04	1.008	1.059	-0.051	1.032	1.237	-0.205.
SANTA CLARA, CA	00542/09	1.014	1.065	-0.051	1.056	1.261	-0.205
DETROIT, MI	00710/01	0.996	1.047	-0.051	0.983	1.188	-0.205

(a) more than a twenty percentage point gain or loss in the full-variation GPCI

GPCI: all education sample, one-digit occupations, county data within CMSAs (Run #124)

TABLE 5-3

LOCALITIES WITH LARGE DIFFERENCES BETWEEN THE PHYSICIANS' WORK GPCI AND HOURLY EARNINGS OF PHYSICIANS IN PHYSICIANS' OFFICES (a)

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	MD-CMSA/ County	CMSA/County GPCI	Diff	MD-CMSA/ County	CMSA/County GPCI	Diff
Largest Increases							
LAREDO, TX	00900/33	1.328	0.957	0.371	2.313	0.830	1.483
AMARILLO, TX	00900/26	1.183	0.976	0.207	1.730	0.903	0.827
KANKAKEE, IL	00621/06	1.144	0.957	0.187	1.576	0.827	0.748
SAN ANGELO, TX	00900/30	1.110	0.948	0.161	1.439	0.794	0.645
VICTORIA, TX	00900/32	1.100	0.984	0.115	1.398	0.937	0.462
MONROE, LA	00528/05	1.074	0.959	0.115	1.295	0.835	0.460
ALEXANDRIA, LA	00528/07	1.074	0.959	0.115	1.295	0.836	0.459
TYLER, TX	00900/27	1.074	0.972	0.102	1.295	0.887	0.409
BATON ROUGE, LA	00528/03	1.066	0.985	0.081	1.265	0.940	0.325
LUBBOCK, TX	00900/21	1.035	0.955	0.080	1.141	0.821	0.320
ROCKFORD, IL	00621/02	1.060	0.981	0.079	1.241	0.924	0.318
WACO, TX	00900/22	1.043	0.966	0.077	1.172	0.866	0.306
SM CITIES (CITY LIMITS) KY	00660/02	1.037	0.963	0.073	1.147	0.854	0.293
TEXARKANA, TX	00900/08	1.028	0.956	0.072	1.110	0.824	0.286
LAFAYETTE, LA	00528/06	1.043	0.975	0.067	1.171	0.901	0.270
DENTON, TX	00900/12	1.035	0.969	0.066	1.141	0.876	0.265
LEXINGTON & LOUISVILLE, KY	00660/01	1.054	0.989	0.064	1.215	0.958	0.257
VENTURA, CA	02050/17	1.092	1.030	0.063	1.369	1.118	0.251
METROPOLITAN IN	00630/01	1.049	0.989	0.060	1.197	0.958	0.240
SALEM, ET AL. (CITIES), OR	01330/03	1.025	0.965	0.060	1.098	0.860	0.239
SAN ANTONIO, TX	00900/07	1.038	0.979	0.059	1.154	0.918	0.236
NORTHEAST IOWA	00640/02	1.016	0.959	0.057	1.063	0.834	0.229
NORTH CENTRAL IOWA	00640/03	1.007	0.954	0.054	1.029	0.814	0.215
ARKANSAS	00520/13	1.004	0.951	0.053	1.018	0.805	0.213
LAKE CHARLES, LA	00528/04	1.028	0.975	0.052	1.110	0.900	0.210
ABILENE, TX	00900/29	1.012	0.961	0.052	1.048	0.842	0.206
NORTHWEST IOWA	00640/06	0.995	0.944	0.051	0.980	0.776	0.204
SMALL GA CITIES 03	01040/03	1.020	0.970	0.050	1.080	0.878	0.201
SPRINGFIELD, IL	00621/09	1.029	0.979	0.050	1.115	0.916	0.199
CHARLESTON, WV	16510/16	1.029	0.979	0.050	1.115	0.917	0.198
SM E. CITIES, MO	11260/02	0.990	0.940	0.049	0.959	0.762	0.197
URBAN IN	00630/02	1.024	0.975	0.049	1.098	0.902	0.196
REST OF IN	00630/03	1.021	0.973	0.048	1.085	0.891	0.193
REST OF KENTUCKY	00660/03	1.011	0.963	0.048	1.043	0.851	0.192
CHAMPAIGN-URBANA, IL	00621/10	1.000	0.953	0.047	1.000	0.812	0.189
NORTHWEST, IL	00621/01	0.993	0.948	0.045	0.971	0.793	0.179
SOUTHERN, IL	00621/14	0.993	0.948	0.045	0.971	0.793	0.179
QUINCY, IL	00621/07	0.993	0.948	0.045	0.971	0.793	0.179
SOUTHEAST, IL	00621/13	0.993	0.948	0.045	0.971	0.793	0.179

TABLE 5-3 (continued)

LOCALITIES WITH LARGE DIFFERENCES BETWEEN THE PHYSICIANS' WORK GPCI AND HOURLY EARNINGS OF PHYSICIANS IN PHYSICIANS' OFFICES (a)

		QUARTER-VARIATION			FULL-VARIATION		
Locality Name	Carrier/ Locality	MD-CMSA/ County	CMSA/County GPCI	Diff	MD-CMSA/ County	CMSA/County GPCI	Diff
EASTERN VALLEY, WV	16510/18	1.001	0.956	0.045	1.003	0.825	0.178
OHIO RIVER VALLEY, WV	16510/19	1.001	0.957	0.044	1.006	0.829	0.177
CORPUS CHRISTI, TX	00900/24	1.028	0.984	0.044	1.110	0.934	0.176
FORT WORTH, TX	00900/28	1.033	0.989	0.044	1.134	0.958	0.176
LAS VEGAS, ET AL. (CITIES), NV	01290/01	1.062	1.019	0.043	1.246	1.075	0.171
ORANGE, TX	00900/25	1.036	0.994	0.043	1.146	0.974	0.171
BEAUMONT, TX	00900/20	1.036	0.994	0.043	1.146	0.974	0.171
YUMA, AZ	01030/08	1.028	0.985	0.042	1.110	0.941	0.169
MILWAUKEE SURBURBS (SE), WI	00951/46	1.030	0.989	0.041	1.119	0.955	0.164
MC ALLEN, TX	00900/19	1.002	0.962	0.040	1.007	0.847	0.160
EL PASO, TX	00900/14	1.012	0.973	0.039	1.048	0.893	0.155
Largest Decreases							
ALASKA	01020/01	0.970	1.061	-0.092	0.879	1.246	-0.367
ELKO & ELY (CITIES), NV	01290/03	0.904	0.987	-0.083	0.617	0.950	-0.333
MIDLAND, TX	00900/23	0.931	1.006	-0.075	0.725	1.025	-0.300
VERMONT	00780/50	0.899	0.971	-0.072	0.596	0.884	-0.288
BAKERSFIELD , CA	00542/14	0.953	1.024	-0.071	0.812	1.098	-0.286
GALVESTON, TX	00900/15	0.920	0.990	-0.071	0.678	0.961	-0.283
SAN FRANCISCO, CA	00542/05	1.000	1.070	-0.069	1.001	1.278	-0.277
RENO, ET AL. (CITIES), NV	01290/02	0.933	0.998	-0.065	0.731	0.993	-0.262
MARIN/NAPA/SOLANO, CA	00542/03	0.962	1.016	-0.054	0.848	1.066	-0.218
OAKLAND/BERKLEY, CA	00542/07	0.989	1.043	-0.054	0.955	1.172	-0.217
DC +MD/VA SUBURBS	00580/01	1.010	1.058	-0.048	1.041	1.233	-0.192
HAWAII	01120/01	0.950	0.996	-0.047	0.799	0.986	-0.186
MANHATTAN, NY	00803/01	1.050	1.096	-0.046	1.201	1.386	-0.185
CENTRAL MAINE	21200/02	0.916	0.962	-0.046	0.666	0.847	-0.181
NEW HAMPSHIRE	00780/40	0.946	0.990	-0.045	0.783	0.962	-0.179
SOUTHERN MAINE	21200/03	0.934	0.976	-0.043	0.735	0.905	-0.171
WICHITA FALLS, TX	00900/34	0.912	0.952	-0.040	0.647	0.808	-0.161
NYC SUBURBS/LONG I., NY	00803/02	1.028	1.066	-0.038	1.111	1.263	-0.152
FLAGSTAFF, AZ	01030/05	0.932	0.970	-0.038	0.730	0.880	-0.151
PRESCOTT, AZ	01030/07	0.932	0.970	-0.038	0.730	0.880	-0.151

(a) more than a fifteen percentage point gain or loss in the full-variation GPCI

GPCI: all education sample, one-digit occupations, county data within CMSAs (Run #123)

San Francisco's index rises from 0.822 to 1.001. Nevertheless, some large cities remain among the areas with the lowest physician earnings indexes compared to the other professional earnings index (the GPCI), even for office-based physicians. Some other correlates of extensive teaching activity in urban centers, such as large numbers of lower-earning research-oriented doctors, could help explain the discrepancy.

Some of the localities with the highest physician earnings indexes relative to the professional earnings index appear to be present because of random sampling error. Random error because of very small sample sizes of physicians may account for the presence of many of the small Texas localities among the highest earning physician areas. Otherwise, many of the areas with the largest "excess" physician earnings seem to be smaller cities or more rural areas, predominantly in the South and Midwest. It may be that these are areas with lower physician to population ratios where physician practices are able to achieve high volumes, and thus earn large profits. Also, these small city and rural areas may have less managed care and utilization review, further augmenting the scope for profit-enhancing entrepreneurial activity by physicians.

The physician work GPCI may accurately measure the "opportunity wage" component of physician earnings in these areas. The discrepancy with the GPCI may arise mostly from a higher profit, or entrepreneurial return, component in these areas. As we have argued in Section 5.1 above, the profit component of physician net income should not be reflected in the physician work GPCI.

In sum, in many areas there are large discrepancies between the physician work GPCI and relative physician earnings as reported on the 1990 Census. Although many questions remain to be answered about geographic differences in physician earnings, we do not believe that these discrepancies are evidence of gross inaccuracies in the physician work GPCI. First, we believe that the Census data measures the appropriate concept of physician earnings with considerable random and systematic error. The random error is due to small sample sizes of physicians in many areas. The systematic error is the result of lack of control for physician characteristics, such as intern/resident status, specialty, patient care involvement, etc. More importantly, we believe that, for the reasons given in Section 5.1 above, actual physician earnings are not an appropriate alternative or comparison for the physician work GPCI. Physician net income includes an entrepreneurial, profit component in addition to an opportunity wage component. The profit component of earnings should not be reflected in the GPCI. Unfortunately, it is difficult to separate the two components of actual physician income.

6.0 FINAL PAYMENT PHYSICIAN WORK GPCIs

After reviewing the earlier analyses in this report, the Health Care Financing Administration (HCFA) made the following decisions:

- the physician work GPCI should continue to reflect professional earnings rather than physician earnings or earnings of all workers;
- earnings of professionals of all education levels rather than only those with advanced degrees should be reflected in the GPCI;
- a one digit rather than two digit occupation mix adjustment should continue to be used;
- county-specific earnings should be used within large metropolitan areas (CMSAs) rather than metropolitan area earnings; and
- median hourly earnings rather than mean hourly earnings should continue to be used.

In addition, HCFA concurred that the GPCI should be weighted by relative value units RVUs (work RVUs in the case of the work GPCI) rather than population. Weighting by RVUs has two advantages. First, county RVUs identify the counties where Medicare services are provided more accurately than county population. The GPCI should be weighted to reflect input prices in the locations where services are performed. Second, weighting by RVUs assures that aggregate Medicare Fee Schedule payments for physician work will not change if the payment locality configuration is altered (e.g., if a state with multiple localities becomes a single statewide locality). The differences between the RVU-weighted work GPCI and the population-weighted work GPCI are shown in Appendix 4, where payment localities are ranked in descending order of the difference in the two GPCIs.[5] The change in the quarter work GPCI from RVU-weighting is one percentage point or less for all payment localities.

The 1996 updated GPCI differs from the 1992 GPCI in the following respects:

---

[5]The weight affects the computation of the GPCI in two places (see Chapter 3). The first is in normalizing hourly earnings by national average hourly earnings. For the final work GPCIs, the national average is weighted by work RVUs rather than by population. This has the effect of scaling each payment locality's GPCI up or down by the same proportion. The second effect occurs in taking a weighted average of county or county part values to form an index value for a payment locality. For the final work GPCIs, this average is weighted by work RVUs rather than by population. This change affects each locality's index according to the difference in distribution among counties/county parts of RVUs versus population, and the difference among counties/county parts of hourly professional earnings.

- based on 1990 Census earnings data rather than 1980 Census data;
- reflects OMB's June 1993 redefinitions of metropolitan areas;[6]
- RVU-weighted rather than population-weighted;
- reflects earnings of professionals of all education levels rather than 5 or more years of college;
- workers are classified by place of work everywhere rather than place of residence outside of large metropolitan areas;[7] and
- county-specific earnings, rather than metropolitan area earnings, are measured within large metropolitan areas (CMSAs).

Of these changes, the use of the more recent 1990 Census earnings data has by far the largest overall effect on the work GPCI.

After the original computation of the 1996 work GPCI, HCFA actuaries determined that the quarter work GPCI would have to be rescaled to achieve "budget neutrality", that is, to ensure that aggregate payments to physicians are not affected by updating the GPCI. The quarter work GPCI was therefore multiplied by the factor 1.00073 and rounded to three decimal places, which has the effect of increasing the quarter work GPCI by .001 in each payment locality. In addition, a transitional 1995 GPCI was calculated. Congress has specified that when the GPCI is updated, in the first year the GPCI will reflect one-half of the difference between the current and the updated GPCI. Thus, the 1995 rescaled quarter work GPCI was calculated as the simple average of the 1996 rescaled quarter work GPCI and the 1992 quarter work GPCI.

Appendix 5 lists:

1. the 1996 full work GPCI;
2. the 1996 quarter work GPCI;
3. the 1996 rescaled quarter work GPCI;
4. the 1995 rescaled quarter work GPCI; and
5. the 1992 quarter work GPCI,

by Medicare payment locality. (The table is sorted by state and locality name within state.) In 1995, the 1995 rescaled quarter work GPCI will be used for payment in the Medicare Fee Schedule. Beginning in 1996, the 1996 rescaled quarter work GPCI will be used for payment.

---

[6]Although the GPCI is ultimately calculated for Medicare payment localities, the underlying earnings data is tabulated by the Census Bureau for metropolitan areas and the nonmetropolitan portions of states before it is crosswalked to localities (see Chapter 3).

[7]In computing the 1992 work GPCI with 1980 Census data, for sample size reasons, workers were classified by place of residence outside of Consolidated Metropolitan Statistical Areas. This was not necessary with the 1990 Census data.

Appendix 6 ranks Medicare payment localities by descending order of difference between the 1996 rescaled quarter work GPCI and the 1992 quarter work GPCI. The largest gain is in the Northwest and North Central Connecticut locality, where the the quarter work GPCI rises by 4.7 percent. Twelve other localities gain 2 percent or more. The largest decrease is in Alaska, whose quarter work GPCI falls by 3.8 percent. Five other localities lose more than 3 percent. Since the quarter work GPCI comprises about half of the overall Medicare Fee Schedule Geographic Adjustment Factor (GAF), these changes imply less than a two and one half percent change in the fee for a typical service in any payment locality due to updating the physician work GPCI.

REFERENCES

Physician Payment Review Commission, 1991, Annual Report to Congress. Washington DC: Physician Payment Review Commission.

Pope, G., W.P. Welch, S. Zuckerman, and M.G. Henderson, 1989, "Cost of Practice and Geographic Variation in Fees," Health Affairs, (8)3:117-128.

U.S. General Accounting Office, 1993, Medicare Physician Payment: Geographic Adjusters Appropriate But Could be Improved with New Data. GAO Report GAO/HRD-93-93.

Welch, W. P., S. Zuckerman, and G. Pope, 1989, The Geographic Medicare Economic Index: Alternative Approaches. Final Report to the Health Care Financing Administration under Grants No. 18-C-98326/1-01, 17-C-99222/3-01, and 17-C-98758/1-03.

Zuckerman, S., W.P. Welch, and G. Pope, 1987, The Development of an Interim Geographic Medicare Economic Index. Report to the Health Care Financing Administration under Grants No. 18-C-98326/1-01 and 17-C-98758/1-03.

Zuckerman, S, W.P. Welch, and G. Pope, 1990, "A Geographic Index of Physician Practice Costs", Journal of Health Economics, (9)1:39-69.

APPENDIX 1

ALTERNATIVE UPDATED PHYSICIAN WORK GPCIs COMPARED TO 1992 GPCI

(Full Variation)

APPENDIX 1

ALTERNATIVE UPDATED PHYSICIAN WORK GPCIs COMPARED TO 1992 (Current) GPCI (Full Variation)
(sorted by carrier/locality number)

			Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
Locality Name	Carrier/ Locality	Current GPCI	MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
NORTHWEST AL	00510/01	0.940	0.914	0.949	0.953	0.923	0.953	0.956
NORTH CENTRAL AL	00510/02	0.880	0.864	0.882	0.885	0.879	0.903	0.906
SOUTHEAST AL	00510/03	0.888	0.862	0.875	0.878	0.865	0.885	0.888
MOBILE, AL	00510/04	0.856	0.894	0.898	0.902	0.892	0.907	0.910
BIRMINGHAM, AL	00510/05	0.924	0.956	0.975	0.979	1.007	0.986	0.990
REST OF AL	00510/06	0.900	0.872	0.879	0.882	0.865	0.902	0.905
ARKANSAS	00520/13	0.840	0.801	0.802	0.805	0.804	0.822	0.825
NEW ORLEANS, LA	00528/01	0.976	0.987	0.993	0.997	1.031	0.966	0.970
SHREVEPORT, LA	00528/02	1.012	0.889	0.895	0.898	0.901	0.914	0.917
BATON ROUGE, LA	00528/03	0.964	0.930	0.937	0.940	0.978	0.925	0.928
LAKE CHARLES, LA	00528/04	0.900	0.898	0.897	0.901	0.903	0.910	0.913
MONROE, LA	00528/05	0.916	0.844	0.832	0.835	0.856	0.887	0.890
LAFAYETTE, LA	00528/06	0.928	0.946	0.898	0.902	0.935	0.895	0.898
ALEXANDRIA, LA	00528/07	0.940	0.888	0.833	0.836	0.842	0.856	0.860
REST OF LOUISIANA	00528/50	0.888	0.858	0.848	0.851	0.859	0.878	0.882
N. COASTAL CNTYS, CA	00542/01	1.012	1.016	1.019	1.022	1.021	1.029	1.032
NE RURAL CA	00542/02	1.004	1.008	0.937	0.940	0.940	0.951	0.955
MARIN/NAPA/SOLANO, CA	00542/03	1.048	1.046	1.104	1.066	1.065	1.085	1.067
SACRAMENTO/SURR. CNTYS, CA	00542/04	1.104	1.094	1.081	1.085	1.070	1.061	1.064
SAN FRANCISCO, CA	00542/05	1.152	1.191	1.237	1.279	1.324	1.179	1.194

Appendix 1 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample					
				One-Digit Occupations				Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
SAN MATEO, CA	00542/06	1.152	1.191	1.237	1.200	1.180	1.179	1.181
OAKLAND-BERKELEY, CA	00542/07	1.112	1.106	1.168	1.173	1.166	1.156	1.162
STOCKTON/SURR. CNTYS, CA	00542/08	1.076	1.051	1.008	1.011	0.976	1.027	1.030
SANTA CLARA, CA	00542/09	1.192	1.216	1.256	1.262	1.270	1.224	1.229
MERCED/SURR. CNTYS, CA	00542/10	1.072	1.065	1.003	1.006	1.005	1.031	1.035
FRESNO/MADERA, CA	00542/11	1.024	1.059	1.002	1.005	1.029	1.009	1.013
MONTEREY/SANTA CRUZ, CA	00542/12	1.092	1.004	1.030	1.034	1.051	1.024	1.028
KINGS/TULARE, CA	00542/13	0.996	1.032	0.952	0.955	0.926	0.981	0.984
BAKERSFIELD, CA	00542/14	1.112	1.120	1.094	1.098	1.066	1.100	1.104
SAN BERNADINO/E.CENTRAL CA	00542/15	1.100	1.077	1.056	1.065	1.027	1.060	1.065
RIVERSIDE, CA	00542/27	1.104	1.079	1.058	1.050	1.039	1.062	1.059
COLORADO	00550/01	0.996	0.946	0.952	0.947	0.920	0.943	0.939
DELAWARE	00570/01	1.104	1.078	1.071	1.085	1.119	1.083	1.085
D.C. + MD/VA SUBURBS	00580/01	1.236	1.220	1.228	1.234	1.245	1.167	1.172
REST OF FLORIDA	00590/01	0.864	0.873	0.866	0.869	0.869	0.892	0.895
N/NC FLORIDA CITIES	00590/02	0.900	0.938	0.917	0.920	0.936	0.929	0.933
FORT LAUDERDALE, FL	00590/03	0.972	1.018	0.994	0.998	1.040	0.995	0.999
MIAMI, FL	00590/04	1.136	1.091	1.061	1.065	1.132	1.033	1.037
NORTHWEST, IL	00621/01	0.896	0.785	0.790	0.793	0.793	0.826	0.829
ROCKFORD, IL	00621/02	1.040	1.011	0.987	0.924	0.902	0.988	0.927
DE KALB, IL	00621/03	0.912	0.812	0.823	0.823	0.820	0.853	0.860
ROCK ISLAND, IL	00621/04	0.980	0.896	0.888	0.891	0.897	0.906	0.909
PEORIA, IL	00621/05	1.036	0.868	0.914	0.918	0.907	0.942	0.946
KANKAKEE, IL	00621/06	0.888	0.876	0.825	0.828	0.800	0.838	0.841

Appendix 1 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
QUINCY, IL	00621/07	0.896	0.785	0.790	0.793	0.793	0.826	0.829
NORMAL, IL	00621/08	0.988	0.844	0.874	0.877	0.895	0.902	0.905
SPRINGFIELD, IL	00621/09	0.984	0.908	0.913	0.916	0.901	0.903	0.907
CHAMPAIGN-URBANA, IL	00621/10	0.860	0.785	0.809	0.812	0.836	0.815	0.818
DECATUR, IL	00621/11	0.924	0.826	0.833	0.836	0.828	0.872	0.875
EAST ST. LOUIS, IL	00621/12	0.956	0.961	0.943	0.947	0.961	0.958	0.961
SOUTHEAST IL	00621/13	0.896	0.785	0.790	0.793	0.793	0.826	0.829
SOUTHERN IL	00621/14	0.896	0.785	0.790	0.793	0.793	0.826	0.829
SUBURBAN CHICAGO, IL	00621/15	1.080	1.047	1.046	1.030	1.033	1.045	1.031
CHICAGO, IL	00621/16	1.176	1.132	1.102	1.117	1.161	1.085	1.098
METROPOLITAN INDIANA	00630/01	0.992	0.972	0.954	0.958	0.946	0.969	0.975
URBAN INDIANA	00630/02	0.920	0.889	0.899	0.902	0.897	0.919	0.922
REST OF INDIANA	00630/03	0.916	0.878	0.890	0.891	0.856	0.919	0.922
SE IOWA (INCL IOWA CITY)	00640/01	0.904	0.835	0.837	0.840	0.849	0.843	0.846
NORTHEAST IOWA	00640/02	0.888	0.823	0.832	0.835	0.813	0.854	0.857
NORTH CENTRAL IOWA	00640/03	0.884	0.797	0.812	0.815	0.793	0.826	0.829
S.CEN. IA(EXCL DES MOINES)	00640/04	0.848	0.751	0.761	0.764	0.748	0.787	0.790
DES MOINES(POLK/WARREN),IA	00640/05	0.988	0.923	0.921	0.924	0.936	0.912	0.915
NORTHWEST IOWA	00640/06	0.876	0.772	0.774	0.776	0.772	0.794	0.797
SOUTHWEST IOWA	00640/07	0.872	0.799	0.804	0.807	0.799	0.822	0.825
REST OF KANSAS	00650/01	0.812	0.794	0.811	0.814	0.810	0.828	0.831
NEBRASKA	00655/00	0.840	0.784	0.781	0.783	0.780	0.792	0.795
LEXINGTON & LOUISVILLE, KY	00660/01	0.936	0.919	0.955	0.958	0.940	0.950	0.954

Appendix 1 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
SM CITIES (CITY LIMITS) KY	00660/02	0.904	0.879	0.877	0.854	0.831	0.890	0.861
REST OF KENTUCKY	00660/03	0.896	0.856	0.855	0.852	0.827	0.870	0.866
BALTIMORE/SURR. CNTYS, MD	00690/01	1.108	1.064	1.092	1.096	1.073	1.078	1.082
WESTERN MARYLAND	00690/02	1.024	1.033	1.053	1.057	1.029	1.033	1.037
SOUTH + E. SHORE MD	00690/03	1.044	1.051	1.040	1.023	1.010	1.032	1.019
MASSACHUSETTS URBAN	00700/01	1.008	1.075	1.128	1.122	1.107	1.111	1.105
MASS.SUBURBS/RURAL(CITIES)	00700/02	0.988	1.042	1.083	1.069	1.035	1.076	1.068
DETROIT, MI	00710/01	1.236	1.179	1.168	1.188	1.161	1.162	1.182
MICHIGAN, NOT DETROIT	00710/02	1.040	1.000	0.995	0.984	0.955	1.002	0.992
MINNESOTA STATEWIDE	00720/00	0.996	0.881	0.867	0.870	0.836	0.881	0.884
ST. JOSEPH, MO	00740/01	0.800	0.787	0.811	0.814	0.782	0.837	0.840
N. K.C. (CLAY/PLATTE), MO	00740/02	0.912	0.952	0.961	0.964	0.973	0.960	0.963
K.C. (JACKSON COUNTY), MO	00740/03	0.912	0.952	0.961	0.964	0.973	0.960	0.963
SUBURBAN KANSAS CITY, KS	00740/04	0.912	0.952	0.961	0.964	0.973	0.960	0.963
KANSAS CITY, KS	00740/05	0.912	0.952	0.961	0.964	0.973	0.960	0.963
RURAL NW COUNTIES, MO	00740/06	0.812	0.779	0.808	0.811	0.806	0.826	0.829
MONTANA	00751/01	0.868	0.805	0.795	0.798	0.777	0.802	0.805
NEW HAMPSHIRE	00780/40	0.848	0.943	0.958	0.962	0.956	0.942	0.946
VERMONT	00780/50	0.768	0.825	0.881	0.884	0.857	0.868	0.871
BUFFALO/SURR. CNTYS, NY	00801/01	1.024	0.996	1.000	1.004	1.000	1.003	1.007
ROCHESTER/SURR. CNTYS, NY	00801/02	1.084	1.022	1.051	1.055	1.032	1.050	1.054
N. CENTRAL CITIES, NY	00801/03	0.988	1.002	1.026	1.030	1.004	1.026	1.029
REST OF NEW YORK	00801/04	0.952	0.956	0.975	0.979	0.961	0.985	0.988

Appendix 1 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
MANHATTAN, NY	00803/01	1.236	1.299	1.316	1.386	1.511	1.293	1.304
NYC SUBURBS/LONG I., NY	00803/02	1.240	1.300	1.316	1.263	1.231	1.292	1.247
POUGHKPSIE/N.NYC SUBURBS	00803/03	1.016	1.024	1.055	1.049	1.032	1.055	1.050
NORTH DAKOTA	00820/01	0.860	0.764	0.780	0.783	0.763	0.791	0.793
SOUTH DAKOTA	00820/02	0.804	0.714	0.718	0.721	0.709	0.739	0.742
WYOMING	05530/21	0.952	0.875	0.867	0.869	0.856	0.873	0.876
NORTHERN NEW JERSEY	00860/01	1.160	1.238	1.233	1.233	1.238	1.219	1.220
MIDDLE NEW JERSEY	00860/02	1.136	1.141	1.150	1.138	1.111	1.137	1.122
SOUTHERN NEW JERSEY	00860/03	1.064	1.104	1.096	1.101	1.083	1.096	1.114
PHILLY/PITT MED SCHS/HOSPS	00865/01	1.056	1.085	1.085	1.128	1.161	1.081	1.111
LG. PENNSYLVANIA CITIES	00865/02	1.032	1.033	1.040	1.028	1.037	1.044	1.035
SMALL PENNSYLVANIA CITIES	00865/03	0.936	0.900	0.932	0.925	0.916	0.951	0.944
REST OF PENNSYLVANIA	00865/04	0.900	0.853	0.895	0.898	0.875	0.923	0.926
RHODE ISLAND	00870/01	1.036	1.081	1.078	1.074	1.047	1.077	1.073
SOUTH CAROLINA	00880/01	0.884	0.883	0.899	0.902	0.879	0.903	0.906
NORTHEAST RURAL TEXAS	00900/02	0.872	0.884	0.888	0.855	0.838	0.901	0.871
SOUTHEAST RURAL TEXAS	00900/03	0.892	0.893	0.899	0.875	0.872	0.901	0.882
WESTERN RURAL TEXAS	00900/04	0.844	0.811	0.831	0.834	0.820	0.848	0.851
TEMPLE, TX	00900/06	0.876	0.829	0.871	0.874	0.802	0.868	0.871
SAN ANTONIO, TX	00900/07	0.892	0.957	0.915	0.918	0.921	0.916	0.920
TEXARKANA, TX	00900/08	0.812	0.887	0.821	0.824	0.814	0.867	0.871
BRAZORIA, TX	00900/09	1.100	0.938	0.972	0.976	0.952	0.991	0.995
BROWNSVILLE, TX	00900/10	0.920	0.830	0.822	0.824	0.797	0.846	0.850

Appendix 1 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
DALLAS, TX	00900/11	0.984	1.050	1.017	1.052	1.091	1.015	1.039
DENTON, TX	00900/12	0.984	1.050	1.017	0.877	0.840	1.015	0.879
ODESSA, TX	00900/13	1.032	0.829	0.842	0.844	0.862	0.838	0.840
EL PASO, TX	00900/14	0.980	0.956	0.890	0.893	0.892	0.902	0.906
GALVESTON, TX	00900/15	0.928	0.925	0.958	0.961	0.953	0.971	0.974
GRAYSON, TX	00900/16	0.856	1.243	0.836	0.839	1.003	0.865	0.868
LONGVIEW, TX	00900/17	0.872	0.941	0.897	0.900	0.906	0.928	0.932
HOUSTON, TX	00900/18	1.056	1.091	1.069	1.088	1.148	1.052	1.063
MC ALLEN, TX	00900/19	0.780	0.936	0.845	0.848	0.853	0.870	0.873
BEAUMONT, TX	00900/20	0.992	0.984	0.971	0.975	1.008	0.978	0.981
LUBBOCK, TX	00900/21	0.800	0.881	0.818	0.821	0.840	0.826	0.829
WACO, TX	00900/22	0.924	0.821	0.863	0.866	0.871	0.855	0.858
MIDLAND, TX	00900/23	1.092	1.053	1.021	1.025	1.038	0.997	1.001
CORPUS CHRISTI, TX	00900/24	0.904	0.928	0.931	0.935	0.938	0.956	0.959
ORANGE, TX	00900/25	0.992	0.984	0.971	0.975	1.008	0.978	0.981
AMARILLO, TX	00900/26	0.888	0.925	0.900	0.903	0.869	0.919	0.922
TYLER, TX	00900/27	0.936	0.915	0.884	0.887	0.895	0.895	0.899
FORT WORTH, TX	00900/28	0.892	0.963	0.946	0.958	0.965	0.970	0.979
ABILENE, TX	00900/29	0.884	0.853	0.840	0.843	0.822	0.842	0.845
SAN ANGELO, TX	00900/30	0.816	0.828	0.791	0.794	0.775	0.835	0.838
AUSTIN, TX	00900/31	0.876	0.944	0.955	0.959	0.998	0.929	0.933
VICTORIA, TX	00900/32	0.904	1.117	0.934	0.937	1.176	1.009	1.014
LAREDO, TX	00900/33	0.872	0.831	0.827	0.830	0.868	0.847	0.850

Appendix 1 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
WICHITA FALLS, TX	00900/34	0.876	0.889	0.806	0.808	0.818	0.854	0.857
UTAH	00910/09	0.972	0.946	0.906	0.909	0.891	0.894	0.897
W + SE WA (EXCL SEATTLE)	00930/01	1.032	0.920	0.941	0.938	0.907	0.941	0.942
SEATTLE (KING CNTY), WA	00930/02	1.076	0.990	1.018	1.028	1.040	1.001	1.005
SPOKANE+RICHLND(CITIES)	00930/03	0.984	0.905	0.933	0.936	0.913	0.936	0.939
E.CEN+NE WA (EXCL SPOKANE)	00930/04	0.964	0.905	0.933	0.936	0.913	0.936	0.939
MILWAUKEE, WI	00951/04	1.032	1.017	0.985	1.008	1.016	0.977	0.997
NORTHWEST WISCONSIN	00951/12	0.864	0.847	0.850	0.853	0.809	0.867	0.870
CENTRAL WISCONSIN	00951/13	0.840	0.834	0.836	0.839	0.798	0.856	0.859
SOUTHWEST WISCONSIN	00951/14	0.840	0.834	0.836	0.839	0.798	0.856	0.859
MADISON, WI (DANE COUNTY)	00951/15	0.908	0.932	0.959	0.963	0.927	0.941	0.944
LA CROSSE, WI (W-CENTRAL)	00951/19	0.904	0.897	0.892	0.895	0.848	0.899	0.902
WAUSAU, WI (N-CENTRAL)	00951/36	0.884	0.905	0.850	0.853	0.828	0.865	0.868
GREEN BAY, WI (NORTHEAST)	00951/40	0.916	0.916	0.889	0.892	0.864	0.908	0.911
MILWAUKEE SUBURBS, WI (SE)	00951/46	1.040	1.008	0.988	0.955	0.923	0.991	0.958
JANESVILLE, WI (S-CENTRAL)	00951/54	0.880	0.844	0.858	0.861	0.816	0.878	0.881
OSHKOSH, WI (E-CENTRAL)	00951/60	0.896	0.900	0.888	0.891	0.849	0.909	0.913
PUERTO RICO	00973/20	0.528	0.578	0.523	0.518	0.520	0.534	0.515
VIRGIN ISLANDS	00973/50	*******	0.916	0.864	0.868	0.941	0.868	0.873
ALASKA	01020/01	1.424	1.238	1.242	1.246	1.202	1.224	1.228
PHOENIX, AZ	01030/01	1.012	1.063	1.021	1.025	1.032	1.012	1.016
TUCSON (CITY), AZ	01030/02	0.948	0.909	0.912	0.915	0.944	0.914	0.917
FLAGSTAFF (CITY), AZ	01030/05	0.932	0.868	0.878	0.880	0.856	0.896	0.899

Appendix 1 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
PRESCOTT (CITY), AZ	01030/07	0.932	0.868	0.878	0.880	0.856	0.896	0.899
YUMA (CITY), AZ	01030/08	0.932	0.959	0.938	0.941	0.876	0.960	0.963
REST OF ARIZONA	01030/99	0.948	0.907	0.907	0.910	0.899	0.918	0.922
ATLANTA, GA	01040/01	0.900	1.013	1.032	1.036	1.069	1.019	1.023
SMALL GA CITIES 02	01040/02	0.848	0.912	0.924	0.927	0.899	0.940	0.943
SMALL GA CITIES 03	01040/03	0.844	0.867	0.876	0.879	0.873	0.884	0.887
REST OF GEORGIA	01040/04	0.824	0.836	0.848	0.851	0.839	0.860	0.863
HAWAII	01120/01	1.012	0.922	0.982	0.986	0.987	0.968	0.972
LAS VEGAS,ET AL(CITIES),NV	01290/01	1.144	1.103	1.071	1.075	1.051	1.053	1.057
RENO, ET AL (CITIES), NV	01290/02	1.032	1.032	0.989	0.993	0.991	0.992	0.996
ELKO & ELY (CITIES), NV	01290/03	0.936	0.949	0.947	0.950	0.930	0.935	0.938
REST OF NEVADA	01290/99	1.080	1.058	1.031	1.035	1.015	1.017	1.021
NEW MEXICO	01360/05	0.924	0.863	0.878	0.882	0.854	0.874	0.877
OKLAHOMA	01370/00	0.876	0.845	0.868	0.872	0.876	0.883	0.886
PORTLAND,ET AL (CITIES),OR	01380/01	0.972	0.954	0.981	0.987	0.965	0.972	0.975
EUGENE, ET AL (CITIES), OR	01380/02	0.872	0.821	0.837	0.840	0.816	0.832	0.835
SALEM, ET AL (CITIES), OR	01380/03	0.896	0.870	0.857	0.860	0.831	0.864	0.867
SW OR. CITIES(CITY LIMITS)	01380/12	0.896	0.841	0.870	0.873	0.821	0.892	0.896
REST OF OREGON	01380/99	0.916	0.875	0.890	0.884	0.847	0.899	0.893
SANTA BARBARA, CA	02050/16	1.048	1.050	1.024	1.028	1.071	1.025	1.029
VENTURA, CA	02050/17	1.136	1.161	1.114	1.119	1.119	1.126	1.130
LOS ANGELES, CA (1ST OF 8)	02050/18	1.240	1.283	1.227	1.232	1.338	1.205	1.210
LOS ANGELES, CA (2ND OF 8)	02050/19	1.240	1.283	1.227	1.232	1.338	1.205	1.210

Appendix 1 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
LOS ANGELES, CA (3RD OF 8)	02050/20	1.240	1.283	1.227	1.232	1.338	1.205	1.210
LOS ANGELES, CA (4TH OF 8)	02050/21	1.240	1.283	1.227	1.232	1.338	1.205	1.210
LOS ANGELES, CA (5TH OF 8)	02050/22	1.240	1.283	1.227	1.232	1.338	1.205	1.210
LOS ANGELES, CA (6TH OF 8)	02050/23	1.240	1.283	1.227	1.232	1.338	1.205	1.210
LOS ANGELES, CA (7TH OF 8)	02050/24	1.240	1.283	1.227	1.232	1.338	1.205	1.210
LOS ANGELES, CA (8TH OF 8)	02050/25	1.240	1.283	1.227	1.232	1.338	1.205	1.210
ANAHEIM-SANTA ANA, CA	02050/26	1.184	1.243	1.150	1.155	1.214	1.134	1.138
SAN DIEGO/IMPERIAL, CA	02050/28	1.104	1.123	1.070	1.075	1.100	1.057	1.061
SOUTH IDAHO	05130/11	0.868	0.878	0.844	0.847	0.852	0.857	0.861
NORTH IDAHO	05130/12	0.860	0.861	0.821	0.824	0.836	0.843	0.846
TENNESSEE	05440/35	0.876	0.892	0.893	0.896	0.895	0.906	0.909
URBAN (CITY LIMITS) NC	05535/94	0.900	0.850	0.875	0.878	0.854	0.885	0.888
REST OF NORTH CAROLINA	05535/95	0.852	0.850	0.875	0.878	0.854	0.885	0.888
NW AND N.CENTRAL CONN.	10230/01	1.008	1.146	1.183	1.194	1.172	1.160	1.167
SW CONNECTICUT	10230/02	1.212	1.262	1.263	1.268	1.296	1.241	1.245
SOUTH CENTRAL CONN.	10230/03	1.072	1.184	1.216	1.220	1.227	1.200	1.204
EASTERN CONN.	10230/04	0.996	1.117	1.134	1.111	1.089	1.125	1.107
REST OF MISSISSIPPI	10250/01	0.840	0.824	0.808	1.025	1.022	0.818	1.019
URBAN MS (CITY LIMITS)	10250/02	0.864	0.872	0.877	0.811	0.794	0.867	0.821
RICHMOND+CHARLOTTESVL, VA	10490/01	0.900	0.977	1.021	0.881	0.872	1.014	0.871
TIDEWATER+N. VA COUNTIES	10490/02	0.956	1.031	1.038	1.025	1.034	1.024	1.017
SM. TOWN/INDUSTRIAL VA	10490/03	0.884	0.873	0.903	1.042	1.026	0.920	1.028
REST OF VIRGINIA	10490/04	0.868	0.876	0.908	0.906	0.880	0.926	0.923
ST. LOUIS/LG. E.CITIES, MO	11260/01	0.952	0.980	0.961	0.911	0.897	0.971	0.929

Appendix 1 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
SMALL E. CITIES	11260/02	0.816	0.737	0.759	0.964	0.979	0.787	0.974
REST OF MO	11260/03	0.800	0.745	0.772	0.762	0.753	0.796	0.790
QUEENS, NY	14330/04	1.236	1.299	1.316	0.775	0.767	1.293	0.799
CLEVELAND, OH	16360/01	0.972	0.950	0.947	0.949	0.944	0.958	0.960
SPRINGFIELD, OH	16360/02	0.956	0.950	0.947	0.949	0.944	0.958	0.960
DAYTON, OH	16360/03	1.044	0.950	0.947	0.949	0.944	0.958	0.960
AKRON, OH	16360/04	0.932	0.950	0.947	0.949	0.944	0.958	0.960
TOLEDO (LUCAS/WOOD), OH	16360/05	0.996	0.950	0.947	0.949	0.944	0.958	0.960
CINCINATI, OH	16360/06	0.892	0.950	0.947	0.949	0.944	0.958	0.960
YOUNGSTOWN, OH	16360/07	0.888	0.950	0.947	0.949	0.944	0.958	0.960
COLUMBUS, OH	16360/08	1.016	0.950	0.947	0.949	0.944	0.958	0.960
SCIOTO VALLEY, OH	16360/09	0.896	0.950	0.947	0.949	0.944	0.958	0.960
E. CENTRAL (STEUBENVL), OH	16360/10	0.964	0.950	0.947	0.949	0.944	0.958	0.960
NORTHWEST (LIMA) OH	16360/11	0.948	0.950	0.947	0.949	0.944	0.958	0.960
SOUTHEAST (OHIO VALLEY) OH	16360/12	0.876	0.950	0.947	0.949	0.944	0.958	0.960
MANSFIELD, OH	16360/13	0.884	0.950	0.947	0.949	0.944	0.958	0.960
MARION + SURR. CNTYS., OH	16360/14	0.908	0.950	0.947	0.949	0.944	0.958	0.960
W. CENTR (LAKE PLAINS), OH	16360/15	0.892	0.950	0.947	0.949	0.944	0.958	0.960
CHARLESTON, WV	16510/16	0.948	0.890	0.914	0.917	0.908	0.913	0.917
WHEELING, WV	16510/17	0.900	0.783	0.832	0.835	0.816	0.844	0.847
EASTERN VALLEY, WV	16510/18	0.848	0.803	0.823	0.826	0.805	0.832	0.835
OHIO RIVER VALLEY, WV	16510/19	[illegible]48	[illegible]811	0.826	0.829	0.804	0.839	0.842
SOUTHERN VALLEY, WV	16510/20	0.840	0.790	0.811	0.814	0.794	0.822	0.825
NORTHERN MAINE	21200/01	0.788	0.809	0.852	0.856	0.858	0.864	0.867
CENTRAL MAINE	21200/02	0.768	0.794	0.844	0.847	0.852	0.848	0.850
SOUTHERN MAINE	21200/03	0.824	0.879	0.902	0.905	0.899	0.905	0.908

Note:
Current GPCI- -based on 1980 census data.

MSA Medians- -1990 census data. Uses metropolitan - wide (MSA) earnings for counties in MSAs. Median earnings.

CMSA/County Medians- -1990 census data. Uses county-specific earnings for counties in large metropolitan areas (CMSAs). Median earnings.

CMSA/County Means- -Same as preceeding index except uses mean earnings.

APPENDIX 2

ALTERNATIVE UPDATED PHYSICIAN WORK GPCIs COMPARED TO 1992 GPCI

(Quarter Variation)

APPENDIX 2

ALTERNATIVE UPDATED PHYSICIAN WORK GPCIs COMPARED TO 1992 (Current) GPCI (Quarter Variation)
sorted by carrier/locality number)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
NORTHWEST AL	00510/01	0.985	0.979	0.987	0.988	0.981	0.988	0.989
NORTH CENTRAL AL	00510/02	0.970	0.966	0.970	0.971	0.970	0.976	0.977
SOUTHEAST AL	00510/03	0.972	0.966	0.969	0.970	0.966	0.971	0.972
MOBILE, AL	00510/04	0.964	0.974	0.975	0.975	0.973	0.977	0.978
BIRMINGHAM, AL	00510/05	0.981	0.989	0.994	0.995	1.002	0.997	0.997
REST OF AL	00510/06	0.975	0.968	0.970	0.970	0.966	0.975	0.976
ARKANSAS	00520/13	0.960	0.950	0.950	0.951	0.951	0.956	0.956
NEW ORLEANS, LA	00528/01	0.994	0.997	0.998	0.999	1.008	0.992	0.993
SHREVEPORT, LA	00528/02	1.003	0.972	0.974	0.975	0.975	0.978	0.979
BATON ROUGE, LA	00528/03	0.991	0.982	0.984	0.985	0.995	0.981	0.982
LAKE CHARLES, LA	00528/04	0.975	0.974	0.974	0.975	0.976	0.977	0.978
MONROE, LA	00528/05	0.979	0.961	0.958	0.959	0.964	0.972	0.973
LAFAYETTE, LA	00528/06	0.982	0.986	0.975	0.975	0.984	0.974	0.975
ALEXANDRIA, LA	00528/07	0.985	0.972	0.958	0.959	0.961	0.964	0.965
REST OF LOUISIANA	00528/50	0.972	0.964	0.962	0.963	0.965	0.970	0.970
N. COASTAL CNTYS, CA	00542/01	1.003	1.004	1.005	1.006	1.005	1.007	1.008
NE RURAL CA	00542/02	1.001	1.002	0.984	0.985	0.985	0.988	0.989
MARIN/NAPA/SOLANO, CA	00542/03	1.012	1.012	1.026	1.017	1.016	1.021	1.017
SACRAMENTO/SURR. CNTYS, CA	00542/04	1.026	1.023	1.020	1.021	1.017	1.015	1.016
SAN FRANCISCO, CA	00542/05	1.038	1.048	1.059	1.070	1.081	1.045	1.049

Appendix 2 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
SAN MATEO, CA	00542/06	1.038	1.048	1.059	1.050	1.045	1.045	1.045
OAKLAND-BERKELEY, CA	00542/07	1.028	1.027	1.042	1.043	1.042	1.039	1.040
STOCKTON/SURR. CNTYS, CA	00542/08	1.019	1.013	1.002	1.003	0.994	1.007	1.008
SANTA CLARA, CA	00542/09	1.048	1.054	1.064	1.065	1.067	1.056	1.057
MERCED/SURR. CNTYS, CA	00542/10	1.018	1.016	1.001	1.002	1.001	1.008	1.009
FRESNO/MADERA, CA	00542/11	1.006	1.015	1.000	1.001	1.007	1.002	1.003
MONTEREY/SANTA CRUZ, CA	00542/12	1.023	1.001	1.008	1.009	1.013	1.006	1.007
KINGS/TULARE, CA	00542/13	0.999	1.008	0.988	0.989	0.982	0.995	0.996
BAKERSFIELD, CA	00542/14	1.028	1.030	1.024	1.025	1.017	1.025	1.026
SAN BERNADINO/E.CENTRAL CA	00542/15	1.025	1.019	1.014	1.016	1.007	1.015	1.016
RIVERSIDE, CA	00542/27	1.026	1.020	1.015	1.013	1.010	1.015	1.015
COLORADO	00550/01	0.999	0.986	0.988	0.987	0.980	0.986	0.985
DELAWARE	00570/01	1.026	1.019	1.018	1.021	1.030	1.021	1.021
D.C. + MD/VA SUBURBS	00580/01	1.059	1.055	1.057	1.058	1.061	1.042	1.043
REST OF FLORIDA	00590/01	0.966	0.968	0.966	0.967	0.967	0.973	0.974
N/NC FLORIDA CITIES	00590/02	0.975	0.984	0.979	0.980	0.984	0.982	0.983
FORT LAUDERDALE, FL	00590/03	0.993	1.005	0.999	1.000	1.010	0.999	1.000
MIAMI, FL	00590/04	1.034	1.023	1.015	1.016	1.033	1.008	1.009
NORTHWEST, IL	00621/01	0.974	0.946	0.948	0.948	0.948	0.956	0.957
ROCKFORD, IL	00621/02	1.010	1.003	0.997	0.981	0.976	0.997	0.982
DE KALB, IL	00621/03	0.978	0.953	0.956	0.956	0.955	0.963	0.965
ROCK ISLAND, IL	00621/04	0.995	0.974	0.972	0.973	0.974	0.976	0.977
PEORIA, IL	00621/05	1.009	0.967	0.979	0.979	0.977	0.986	0.987
KANKAKEE, IL	00621/06	0.972	0.969	0.956	0.957	0.950	0.959	0.960

Appendix 2 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
QUINCY, IL	00621/07	0.974	0.946	0.948	0.948	0.948	0.956	0.957
NORMAL, IL	00621/08	0.997	0.961	0.969	0.969	0.974	0.975	0.976
SPRINGFIELD, IL	00621/09	0.996	0.977	0.978	0.979	0.975	0.976	0.977
CHAMPAIGN-URBANA, IL	00621/10	0.965	0.946	0.952	0.953	0.959	0.954	0.954
DECATUR, IL	00621/11	0.981	0.956	0.958	0.959	0.957	0.968	0.969
EAST ST. LOUIS, IL	00621/12	0.989	0.990	0.986	0.987	0.990	0.989	0.990
SOUTHEAST IL	00621/13	0.974	0.946	0.948	0.948	0.948	0.956	0.957
SOUTHERN IL	00621/14	0.974	0.946	0.948	0.948	0.948	0.956	0.957
SUBURBAN CHICAGO, IL	00621/15	1.020	1.012	1.011	1.008	1.008	1.011	1.008
CHICAGO, IL	00621/16	1.044	1.033	1.026	1.029	1.040	1.021	1.025
METROPOLITAN INDIANA	00630/01	0.998	0.993	0.988	0.990	0.986	0.992	0.994
URBAN INDIANA	00630/02	0.980	0.972	0.975	0.975	0.974	0.980	0.981
REST OF INDIANA	00630/03	0.979	0.969	0.972	0.973	0.964	0.980	0.980
SE IOWA (INCL IOWA CITY)	00640/01	0.976	0.959	0.959	0.960	0.962	0.961	0.961
NORTHEAST IOWA	00640/02	0.972	0.956	0.958	0.959	0.953	0.964	0.964
NORTH CENTRAL IOWA	00640/03	0.971	0.949	0.953	0.954	0.948	0.956	0.957
S.CEN. IA(EXCL DES MOINES)	00640/04	0.962	0.938	0.940	0.941	0.937	0.947	0.947
DES MOINES(POLK/WARREN),IA	00640/05	0.997	0.981	0.980	0.981	0.984	0.978	0.979
NORTHWEST IOWA	00640/06	0.969	0.943	0.943	0.944	0.943	0.949	0.949
SOUTHWEST IOWA	00640/07	0.968	0.950	0.951	0.952	0.950	0.955	0.956
REST OF KANSAS	00650/01	0.953	0.948	0.953	0.953	0.953	0.957	0.958
NEBRASKA	00655/00	0.960	0.946	0.945	0.946	0.945	0.948	0.949
LEXINGTON & LOUISVILLE, KY	00660/01	0.984	0.980	0.989	0.990	0.985	0.988	0.988

Appendix 2 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
SM CITIES (CITY LIMITS) KY	00660/02	0.976	0.970	0.969	0.964	0.958	0.972	0.965
REST OF KENTUCKY	00660/03	0.974	0.964	0.964	0.963	0.957	0.968	0.966
BALTIMORE/SURR. CNTYS, MD	00690/01	1.027	1.016	1.023	1.024	1.018	1.019	1.020
WESTERN MARYLAND	00690/02	1.006	1.008	1.013	1.014	1.007	1.008	1.009
SOUTH + E. SHORE MD	00690/03	1.011	1.013	1.010	1.006	1.002	1.008	1.005
MASSACHUSETTS URBAN	00700/01	1.002	1.019	1.032	1.031	1.027	1.028	1.026
MASS.SUBURBS/RURAL(CITIES)	00700/02	0.997	1.010	1.021	1.017	1.009	1.019	1.017
DETROIT, MI	00710/01	1.059	1.045	1.042	1.047	1.040	1.040	1.045
MICHIGAN, NOT DETROIT	00710/02	1.010	1.000	0.999	0.996	0.989	1.000	0.998
MINNESOTA STATEWIDE	00720/00	0.999	0.970	0.967	0.967	0.959	0.970	0.971
ST. JOSEPH, MO	00740/01	0.950	0.947	0.953	0.953	0.945	0.959	0.960
N. K.C. (CLAY/PLATTE), MO	00740/02	0.978	0.988	0.990	0.991	0.993	0.990	0.991
K.C. (JACKSON COUNTY), MO	00740/03	0.978	0.988	0.990	0.991	0.993	0.990	0.991
SUBURBAN KANSAS CITY, KS	00740/04	0.978	0.988	0.990	0.991	0.993	0.990	0.991
KANSAS CITY, KS	00740/05	0.978	0.988	0.990	0.991	0.993	0.990	0.991
RURAL NW COUNTIES, MO	00740/06	0.953	0.945	0.952	0.953	0.951	0.956	0.957
MONTANA	00751/01	0.967	0.951	0.949	0.949	0.944	0.951	0.951
NEW HAMPSHIRE	00780/40	0.962	0.986	0.990	0.991	0.989	0.986	0.986
VERMONT	00780/50	0.942	0.956	0.970	0.971	0.964	0.967	0.968
BUFFALO/SURR. CNTYS, NY	00801/01	1.006	0.999	1.000	1.001	1.000	1.001	1.002
ROCHESTER/SURR. CNTYS, NY	00801/02	1.021	1.006	1.013	1.014	1.008	1.013	1.013
N. CENTRAL CITIES, NY	00801/03	0.997	1.001	1.007	1.007	1.001	1.006	1.007
REST OF NEW YORK	00801/04	0.988	0.989	0.994	0.995	0.990	0.996	0.997

Appendix 2 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
MANHATTAN, NY	00803/01	1.059	1.075	1.079	1.097	1.128	1.073	1.076
NYC SUBURBS/LONG I., NY	00803/02	1.060	1.075	1.079	1.066	1.058	1.073	1.062
POUGHKPSIE/N.NYC SUBURBS	00803/03	1.004	1.006	1.014	1.012	1.008	1.014	1.012
NORTH DAKOTA	00820/01	0.965	0.941	0.945	0.946	0.941	0.948	0.948
SOUTH DAKOTA	00820/02	0.951	0.928	0.930	0.930	0.927	0.935	0.935
WYOMING	05530/21	0.988	0.969	0.967	0.967	0.964	0.968	0.969
NORTHERN NEW JERSEY	00860/01	1.040	1.060	1.058	1.058	1.060	1.055	1.055
MIDDLE NEW JERSEY	00860/02	1.034	1.035	1.038	1.035	1.028	1.034	1.030
SOUTHERN NEW JERSEY	00860/03	1.016	1.026	1.024	1.025	1.021	1.024	1.028
PHILLY/PITT MED SCHS/HOSPS	00865/01	1.014	1.021	1.021	1.032	1.040	1.020	1.028
LG. PENNSYLVANIA CITIES	00865/02	1.008	1.008	1.010	1.007	1.009	1.011	1.009
SMALL PENNSYLVANIA CITIES	00865/03	0.984	0.975	0.983	0.981	0.979	0.988	0.986
REST OF PENNSYLVANIA	00865/04	0.975	0.963	0.974	0.974	0.969	0.981	0.982
RHODE ISLAND	00870/01	1.009	1.020	1.020	1.018	1.012	1.019	1.018
SOUTH CAROLINA	00880/01	0.971	0.971	0.975	0.975	0.970	0.976	0.977
NORTHEAST RURAL TEXAS	00900/02	0.968	0.971	0.972	0.964	0.960	0.975	0.968
SOUTHEAST RURAL TEXAS	00900/03	0.973	0.973	0.975	0.969	0.968	0.975	0.970
WESTERN RURAL TEXAS	00900/04	0.961	0.953	0.958	0.959	0.955	0.962	0.963
TEMPLE, TX	00900/06	0.969	0.957	0.968	0.968	0.950	0.967	0.968
SAN ANTONIO, TX	00900/07	0.973	0.989	0.979	0.980	0.980	0.979	0.980
TEXARKANA, TX	00900/08	0.953	0.972	0.955	0.956	0.953	0.967	0.968
BRAZORIA, TX	00900/09	1.025	0.984	0.993	0.994	0.988	0.998	0.999
BROWNSVILLE, TX	00900/10	0.980	0.958	0.955	0.956	0.949	0.962	0.962

Appendix 2 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
DALLAS, TX	00900/11	0.996	1.012	1.004	1.013	1.023	1.004	1.010
DENTON, TX	00900/12	0.996	1.012	1.004	0.969	0.960	1.004	0.970
ODESSA, TX	00900/13	1.008	0.957	0.960	0.961	0.965	0.959	0.960
EL PASO, TX	00900/14	0.995	0.989	0.973	0.973	0.973	0.976	0.976
GALVESTON, TX	00900/15	0.982	0.981	0.990	0.990	0.988	0.993	0.994
GRAYSON, TX	00900/16	0.964	1.061	0.959	0.960	1.001	0.966	0.967
LONGVIEW, TX	00900/17	0.968	0.985	0.974	0.975	0.977	0.982	0.983
HOUSTON, TX	00900/18	1.014	1.023	1.017	1.022	1.037	1.013	1.016
MC ALLEN, TX	00900/19	0.945	0.984	0.961	0.962	0.963	0.968	0.968
BEAUMONT, TX	00900/20	0.998	0.996	0.993	0.994	1.002	0.994	0.995
LUBBOCK, TX	00900/21	0.950	0.970	0.955	0.955	0.960	0.956	0.957
WACO, TX	00900/22	0.981	0.955	0.966	0.967	0.968	0.964	0.964
MIDLAND, TX	00900/23	1.023	1.013	1.005	1.006	1.010	0.999	1.000
CORPUS CHRISTI, TX	00900/24	0.976	0.982	0.983	0.984	0.985	0.989	0.990
ORANGE, TX	00900/25	0.998	0.996	0.993	0.994	1.002	0.994	0.995
AMARILLO, TX	00900/26	0.972	0.981	0.975	0.976	0.967	0.980	0.981
TYLER, TX	00900/27	0.984	0.979	0.971	0.972	0.974	0.974	0.975
FORT WORTH, TX	00900/28	0.973	0.991	0.986	0.990	0.991	0.993	0.995
ABILENE, TX	00900/29	0.971	0.963	0.960	0.961	0.955	0.960	0.961
SAN ANGELO, TX	00900/30	0.954	0.957	0.948	0.949	0.944	0.959	0.960
AUSTIN, TX	00900/31	0.969	0.986	0.989	0.990	0.999	0.982	0.983
VICTORIA, TX	00900/32	0.976	1.029	0.983	0.984	1.044	1.002	1.003
LAREDO, TX	00900/33	0.968	0.958	0.957	0.958	0.967	0.962	0.962

Appendix 2 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
WICHITA FALLS, TX	00900/34	0.969	0.972	0.951	0.952	0.955	0.963	0.964
UTAH	00910/09	0.993	0.986	0.976	0.977	0.973	0.973	0.974
W + SE WA (EXCL SEATTLE)	00930/01	1.008	0.980	0.985	0.984	0.977	0.985	0.985
SEATTLE (KING CNTY), WA	00930/02	1.019	0.997	1.005	1.007	1.010	1.000	1.001
SPOKANE+RICHLND(CITIES)	00930/03	0.996	0.976	0.983	0.984	0.978	0.984	0.985
E.CEN+NE WA (EXCL SPOKANE)	00930/04	0.991	0.976	0.983	0.984	0.978	0.984	0.985
MILWAUKEE, WI	00951/04	1.008	1.004	0.996	1.002	1.004	0.994	0.999
NORTHWEST WISCONSIN	00951/12	0.966	0.962	0.963	0.963	0.952	0.967	0.968
CENTRAL WISCONSIN	00951/13	0.960	0.958	0.959	0.960	0.949	0.964	0.965
SOUTHWEST WISCONSIN	00951/14	0.960	0.958	0.959	0.960	0.949	0.964	0.965
MADISON, WI (DANE COUNTY)	00951/15	0.977	0.983	0.990	0.991	0.982	0.985	0.986
LA CROSSE, WI (W-CENTRAL)	00951/19	0.976	0.974	0.973	0.974	0.962	0.975	0.975
WAUSAU, WI (N-CENTRAL)	00951/36	0.971	0.976	0.963	0.963	0.957	0.966	0.967
GREEN BAY, WI (NORTHEAST)	00951/40	0.979	0.979	0.972	0.973	0.966	0.977	0.978
MILWAUKEE SUBURBS, WI (SE)	00951/46	1.010	1.002	0.997	0.989	0.981	0.998	0.990
JANESVILLE, WI (S-CENTRAL)	00951/54	0.970	0.961	0.965	0.965	0.954	0.970	0.970
OSHKOSH, WI (E-CENTRAL)	00951/60	0.974	0.975	0.972	0.973	0.962	0.977	0.978
PUERTO RICO	00973/20	0.882	0.895	0.881	0.880	0.880	0.884	0.879
VIRGIN ISLANDS	00973/50	*******	0.979	0.966	0.967	0.985	0.967	0.968
ALASKA	01020/01	1.106	1.060	1.060	1.062	1.051	1.056	1.057
PHOENIX, AZ	01030/01	1.003	1.016	1.005	1.006	1.008	1.003	1.004
TUCSON (CITY), AZ	01030/02	0.987	0.977	0.978	0.979	0.986	0.978	0.979
FLAGSTAFF (CITY), AZ	01030/05	0.983	0.967	0.969	0.970	0.964	0.974	0.975

Appendix 2 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
PRESCOTT (CITY), AZ	01030/07	0.983	0.967	0.969	0.970	0.964	0.974	0.975
YUMA (CITY), AZ	01030/08	0.983	0.990	0.984	0.985	0.969	0.990	0.991
REST OF ARIZONA	01030/99	0.987	0.977	0.977	0.977	0.975	0.980	0.980
ATLANTA, GA	01040/01	0.975	1.003	1.008	1.009	1.017	1.005	1.006
SMALL GA CITIES 02	01040/02	0.962	0.978	0.981	0.982	0.975	0.985	0.986
SMALL GA CITIES 03	01040/03	0.961	0.967	0.969	0.970	0.968	0.971	0.972
REST OF GEORGIA	01040/04	0.956	0.959	0.962	0.963	0.960	0.965	0.966
HAWAII	01120/01	1.003	0.981	0.996	0.996	0.997	0.992	0.993
LAS VEGAS,ET AL(CITIES),NV	01290/01	1.036	1.026	1.018	1.019	1.013	1.013	1.014
RENO, ET AL (CITIES), NV	01290/02	1.008	1.008	0.997	0.998	0.998	0.998	0.999
ELKO & ELY (CITIES), NV	01290/03	0.984	0.987	0.987	0.988	0.982	0.984	0.984
REST OF NEVADA	01290/99	1.020	1.014	1.008	1.009	1.004	1.004	1.005
NEW MEXICO	01360/05	0.981	0.966	0.970	0.970	0.963	0.969	0.969
OKLAHOMA	01370/00	0.969	0.961	0.967	0.968	0.969	0.971	0.972
PORTLAND,ET AL (CITIES),OR	01380/01	0.993	0.989	0.995	0.997	0.991	0.993	0.994
EUGENE, ET AL (CITIES), OR	01380/02	0.968	0.955	0.959	0.960	0.954	0.958	0.959
SALEM, ET AL (CITIES), OR	01380/03	0.974	0.967	0.964	0.965	0.958	0.966	0.967
SW OR. CITIES(CITY LIMITS)	01380/12	0.974	0.960	0.967	0.968	0.955	0.973	0.974
REST OF OREGON	01380/99	0.979	0.969	0.973	0.971	0.962	0.975	0.973
SANTA BARBARA, CA	02050/16	1.012	1.013	1.006	1.007	1.018	1.006	1.007
VENTURA, CA	02050/17	1.034	1.040	1.029	1.030	1.030	1.031	1.033
LOS ANGELES, CA (1ST OF 8)	02050/18	1.060	1.071	1.057	1.058	1.084	1.051	1.053
LOS ANGELES, CA (2ND OF 8)	02050/19	1.060	1.071	1.057	1.058	1.084	1.051	1.053

Appendix 2 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
LOS ANGELES, CA (3RD OF 8)	02050/20	1.060	1.071	1.057	1.058	1.084	1.051	1.053
LOS ANGELES, CA (4TH OF 8)	02050/21	1.060	1.071	1.057	1.058	1.084	1.051	1.053
LOS ANGELES, CA (5TH OF 8)	02050/22	1.060	1.071	1.057	1.058	1.084	1.051	1.053
LOS ANGELES, CA (6TH OF 8)	02050/23	1.060	1.071	1.057	1.058	1.084	1.051	1.053
LOS ANGELES, CA (7TH OF 8)	02050/24	1.060	1.071	1.057	1.058	1.084	1.051	1.053
LOS ANGELES, CA (8TH OF 8)	02050/25	1.060	1.071	1.057	1.058	1.084	1.051	1.053
ANAHEIM-SANTA ANA, CA	02050/26	1.046	1.061	1.038	1.039	1.053	1.033	1.035
SAN DIEGO/IMPERIAL, CA	02050/28	1.026	1.031	1.018	1.019	1.025	1.014	1.015
SOUTH IDAHO	05130/11	0.967	0.970	0.961	0.962	0.963	0.964	0.965
NORTH IDAHO	05130/12	0.965	0.965	0.955	0.956	0.959	0.961	0.962
TENNESSEE	05440/35	0.969	0.973	0.973	0.974	0.974	0.976	0.977
URBAN (CITY LIMITS) NC	05535/94	0.975	0.963	0.969	0.969	0.964	0.971	0.972
REST OF NORTH CAROLINA	05535/95	0.963	0.963	0.969	0.969	0.964	0.971	0.972
NW AND N.CENTRAL CONN.	10230/01	1.002	1.036	1.046	1.048	1.043	1.040	1.042
SW CONNECTICUT	10230/02	1.053	1.066	1.066	1.067	1.074	1.060	1.061
SOUTH CENTRAL CONN.	10230/03	1.018	1.046	1.054	1.055	1.057	1.050	1.051
EASTERN CONN.	10230/04	0.999	1.029	1.034	1.028	1.022	1.031	1.027
REST OF MISSISSIPPI	10250/01	0.960	0.956	0.952	1.006	1.005	0.955	1.005
URBAN MS (CITY LIMITS)	10250/02	0.966	0.968	0.969	0.953	0.949	0.967	0.955
RICHMOND+CHARLOTTESVL, VA	10490/01	0.975	0.994	1.005	0.970	0.968	1.003	0.968
TIDEWATER+N. VA COUNTIES	10490/02	0.989	1.008	1.009	1.006	1.008	1.006	1.004
SM. TOWN/INDUSTRIAL VA	10490/03	0.971	0.968	0.976	1.011	1.006	0.980	1.007
REST OF VIRGINIA	10490/04	0.967	0.969	0.977	0.977	0.970	0.981	0.981
ST. LOUIS/LG. E.CITIES, MO	11260/01	0.988	0.995	0.990	0.978	0.974	0.993	0.982

Appendix 2 (continued)

Locality Name	Carrier/ Locality	Current GPCI	Advanced Degree Sample	All Education Sample				
				One-Digit Occupations			Two-Digit Occupations	
			MSA Medians	MSA Medians	CMSA/County Medians	CMSA/County Means	MSA Medians	CMSA/County Medians
SMALL E. CITIES	11260/02	0.954	0.934	0.940	0.991	0.995	0.947	0.994
REST OF MO	11260/03	0.950	0.936	0.943	0.940	0.938	0.949	0.947
QUEENS, NY	14330/04	1.059	1.075	1.079	0.944	0.942	1.073	0.950
CLEVELAND, OH	16360/01	0.993	0.988	0.987	0.987	0.986	0.989	0.990
SPRINGFIELD, OH	16360/02	0.989	0.988	0.987	0.987	0.986	0.989	0.990
DAYTON, OH	16360/03	1.011	0.988	0.987	0.987	0.986	0.989	0.990
AKRON, OH	16360/04	0.983	0.988	0.987	0.987	0.986	0.989	0.990
TOLEDO (LUCAS/WOOD), OH	16360/05	0.999	0.988	0.987	0.987	0.986	0.989	0.990
CINCINNATI, OH	16360/06	0.973	0.988	0.987	0.987	0.986	0.989	0.990
YOUNGSTOWN, OH	16360/07	0.972	0.988	0.987	0.987	0.986	0.989	0.990
COLUMBUS, OH	16360/08	1.004	0.988	0.987	0.987	0.986	0.989	0.990
SCIOTO VALLEY, OH	16360/09	0.974	0.988	0.987	0.987	0.986	0.989	0.990
E. CENTRAL (STEUBENVL), OH	16360/10	0.991	0.988	0.987	0.987	0.986	0.989	0.990
NORTHWEST (LIMA) OH	16360/11	0.987	0.988	0.987	0.987	0.986	0.989	0.990
SOUTHEAST (OHIO VALLEY) OH	16360/12	0.969	0.988	0.987	0.987	0.986	0.989	0.990
MANSFIELD, OH	16360/13	0.971	0.988	0.987	0.987	0.986	0.989	0.990
MARION + SURR. CNTYS., OH	16360/14	0.977	0.988	0.987	0.987	0.986	0.989	0.990
W. CENTR (LAKE PLAINS), OH	16360/15	0.973	0.988	0.987	0.987	0.986	0.989	0.990
CHARLESTON, WV	16510/16	0.987	0.972	0.978	0.979	0.977	0.978	0.979
WHEELING, WV	16510/17	0.975	0.946	0.958	0.959	0.954	0.961	0.962
EASTERN VALLEY, WV	16510/18	0.962	0.951	0.956	0.956	0.951	0.958	0.959
OHIO RIVER VALLEY, WV	16510/19	0.962	0.953	0.957	0.957	0.951	0.960	0.961
SOUTHERN VALLEY, WV	16510/20	0.960	0.947	0.953	0.953	0.949	0.956	0.956
NORTHERN MAINE	21200/01	0.947	0.952	0.963	0.964	0.964	0.966	0.967
CENTRAL MAINE	21200/02	0.942	0.949	0.961	0.962	0.963	0.962	0.963
SOUTHERN MAINE	21200/03	0.956	0.970	0.975	0.976	0.975	0.976	0.977

Note:
Current GPCI- -based on 1980 census data.

MSA Medians- -1990 census data. Uses metropolitan - wide (MSA) earnings for counties in MSAs. Median earnings.

CMSA/County Medians- -1990 census data. Uses county-specific earnings for counties in large metropolitan areas (CMSAs). Median earnings.

CMSA/County Means- -Same as preceeding index except uses mean earnings.

APPENDIX 3

COMPARISON OF PHYSICIAN WORK GPCI TO EARNINGS OF PHYSICIANS AND NON-MANUFACTURING WORKERS

(Full Variation)

APPENDIX 3

COMPARISON OF PHYSICIAN WORK GPCI TO EARNINGS OF PHYSICIANS AND NON-MANUFACTURING WORKERS (Full Variation)
(sorted by carrier/locality number)

Locality Name	Carrier/ Locality	GPCI	Office-Based MDs Means	Office-Based MDs Medians	All Non-Manufacturing Workers
NORTHWEST AL	00510/01	0.949	0.987	0.946	0.891
NORTH CENTRAL AL	00510/02	0.882	1.102	0.990	0.815
SOUTHEAST AL	00510/03	0.875	0.948	0.997	0.829
MOBILE, AL	00510/04	0.898	1.030	0.975	0.808
BIRMINGHAM, AL	00510/05	0.975	0.974	0.871	0.971
REST OF AL	00510/06	0.879	0.895	0.854	0.811
ARKANSAS	00520/13	0.802	0.964	1.018	0.773
NEW ORLEANS, LA	00528/01	0.993	0.915	1.006	0.921
SHREVEPORT, LA	00528/02	0.895	1.128	0.962	0.850
BATON ROUGE, LA	00528/03	0.937	1.106	1.265	0.887
LAKE CHARLES, LA	00528/04	0.897	0.980	1.111	0.812
MONROE, LA	00528/05	0.832	1.101	1.296	0.770
LAFAYETTE, LA	00528/06	0.898	1.043	1.171	0.793
ALEXANDRIA, LA	00528/07	0.833	1.577	1.296	0.761
REST OF LOUISIANA	00528/50	0.843	0.886	0.951	0.774
N. COASTAL CNTYS, CA	00542/01	1.019	0.781	0.877	1.055
NE RURAL CA	00542/02	0.937	0.841	0.985	0.953
MARIN/NAPA/SOLANO, CA	00542/03	1.104	0.772	0.848	1.177
SACRAMENTO/SURR. CNTYS, CA	00542/04	1.081	0.990	1.050	1.167
SAN FRANCISCO, CA	00542/05	1.237	1.018	1.002	1.443
SAN MATEO, CA	00542/06	1.237	1.172	1.149	1.378
OAKLAND-BERKELEY, CA	00542/07	1.168	0.904	0.956	1.323
STOCKTON/SURR. CNTYS, CA	00542/08	1.008	0.921	1.019	1.053
SANTA CLARA, CA	00542/09	1.256	1.075	1.133	1.324
MERCED/SURR. CNTYS, CA	00542/10	1.003	0.925	0.959	0.989

Appendix 3 (continued)

Locality Name	Carrier/ Locality	GPCI	Office-Based MDs Means	Office-Based MDs Medians	All Non-Manufacturing Workers
FRESNO/MADERA, CA	00542/11	1.002	1.156	1.089	1.005
MONTEREY/SANTA CRUZ, CA	00542/12	1.030	0.966	0.934	1.058
KINGS/TULARE, CA	00542/13	0.952	0.947	0.925	0.947
BAKERSFIELD, CA	00542/14	1.094	1.307	0.812	1.071
SAN BERNADINO/E.CENTRAL CA	00542/15	1.056	1.125	1.058	1.083
RIVERSIDE, CA	00542/27	1.058	1.129	1.157	1.036
COLORADO	00550/01	0.952	0.897	0.939	0.957
DELAWARE	00570/01	1.071	0.880	0.960	1.035
D.C. + MD/VA SUBURBS	00580/01	1.228	1.041	1.041	1.373
REST OF FLORIDA	00590/01	0.866	0.970	0.957	0.834
N/NC FLORIDA CITIES	00590/02	0.917	1.032	1.013	0.906
FORT LAUDERDALE, FL	00590/0[illegible]	0.994	1.225	1.072	1.005
MIAMI, FL	00590/04	1.061	1.157	1.072	1.013
NORTHWEST, IL	00621/01	0.790	0.969	0.972	0.768
ROCKFORD, IL	00621/02	0.987	1.019	1.242	0.920
DE KALB, IL	00621/03	0.823	0.897	0.940	0.799
ROCK ISLAND, IL	00621/04	0.888	0.913	0.901	0.856
PEORIA, IL	00621/05	0.914	0.850	0.841	0.866
KANKAKEE, IL	00621/06	0.825	1.290	1.576	0.814
QUINCY, IL	00621/07	0.790	0.969	0.972	0.768
NORMAL, IL	00621/08	0.874	1.008	0.929	0.856
SPRINGFIELD, IL	00621/09	0.913	1.329	1.116	0.986
CHAMPAIGN-URBANA, IL	00621/10	0.809	0.997	1.001	0.842
DECATUR, IL	00621/11	0.833	0.962	0.965	0.817
EAST ST. LOUIS, IL	00621/1[illegible]	0.943	1.027	1.056	0.957
SOUTHEAST IL	00621/13	0.790	0.969	0.972	0.768
SOUTHERN IL	00621/14	0.790	0.969	0.972	0.768
CHICAGO, IL	00621/16	1.102	1.032	0.997	1.208
METROPOLITAN INDIANA	00630/01	0.954	1.199	1.198	0.905

Appendix 3 (continued)

Locality Name	Carrier/ Locality	GPCI	Office-Based MDs Means	Office-Based MDs Medians	All Non-Manufacturing Workers
URBAN INDIANA	00630/02	0.899	1.124	1.098	0.845
REST OF INDIANA	00630/03	0.890	1.154	1.085	0.806
SE IOWA (INCL IOWA CITY)	00640/01	0.837	0.837	0.914	0.823
NORTHEAST IOWA	00640/02	0.832	1.127	1.064	0.792
NORTH CENTRAL IOWA	00640/03	0.812	0.962	1.030	0.750
S.CEN. IA(EXCL DES MOINES)	00640/04	0.761	0.802	0.852	0.737
DES MOINES(POLK/WARREN),IA	00640/05	0.921	0.825	0.802	0.947
NORTHWEST IOWA	00640/06	0.774	0.917	0.980	0.750
SOUTHWEST IOWA	00640/07	0.804	0.850	0.899	0.790
REST OF KANSAS	00650/01	0.811	0.891	0.718	0.815
NEBRASKA	00655/00	0.781	0.843	0.812	0.787
LEXINGTON & LOUISVILLE, KY	00660/01	0.955	1.166	1.216	0.919
SM CITIES (CITY LIMITS) KY	00660/02	0.877	1.126	1.147	0.791
REST OF KENTUCKY	00660/03	0.855	1.063	1.043	0.779
BALTIMORE/SURR. CNTYS, MD	00690/01	1.092	1.096	1.022	1.150
WESTERN MARYLAND	00690/02	1.053	1.181	1.003	1.078
SOUTH + E. SHORE MD	00690/03	1.040	1.205	0.907	1.050
MASSACHUSETTS URBAN	00700/01	1.128	0.927	0.993	1.239
MASS.SUBURBS/RURAL(CITIES)	00700/02	1.083	0.883	0.925	1.128
DETROIT, MI	00710/01	1.168	1.061	1.107	1.089
MICHIGAN, NOT DETROIT	00710/02	0.995	0.867	0.862	0.887
MINNESOTA STATEWIDE	00720/00	0.867	0.729	0.831	0.833
ST. JOSEPH, MO	00740/01	0.811	0.788	0.864	0.791
N. K.C. (CLAY/PLATTE), MO	00740/02	0.961	0.895	0.871	1.012
K.C. (JACKSON COUNTY), MO	00740/03	0.961	0.895	0.871	1.012
SUBURBAN KANSAS CITY, KS	00740/04	0.961	0.895	0.871	1.012
KANSAS CITY, KS	00740/05	0.961	0.895	0.871	1.012
RURAL NW COUNTIES, MO	00740/06	0.808	0.881	0.866	0.794
MONTANA	00751/01	0.795	0.702	0.726	0.793
NEW HAMPSHIRE	00780/40	0.958	0.768	0.783	1.018

Appendix 3 (continued)

Locality Name	Carrier/ Locality	GPCI	Office-Based MDs Means	Office-Based MDs Medians	All Non-Manufacturing Workers
VERMONT	00780/50	0.881	0.584	0.596	0.952
BUFFALO/SURR. CNTYS, NY	00801/01	1.000	0.937	0.975	0.948
ROCHESTER/SURR. CNTYS, NY	00801/02	1.051	0.899	0.959	0.985
N. CENTRAL CITIES, NY	00801/03	1.026	1.015	0.993	1.012
REST OF NEW YORK	00801/04	0.975	0.973	0.959	0.957
MANHATTAN, NY	00803/01	1.316	1.239	1.201	1.586
NYC SUBURBS/LONG I., NY	00803/02	1.316	1.047	1.111	1.319
POUGHKPSIE/N.NYC SUBURBS	00803/03	1.055	0.883	0.929	1.033
NORTH DAKOTA	00820/01	0.780	0.765	0.867	0.768
SOUTH DAKOTA	00820/02	0.718	0.724	0.754	0.725
WYOMING	05530/21	0.867	0.736	0.876	0.867
NORTHERN NEW JERSEY	00860/01	1.233	1.054	1.115	1.318
MIDDLE NEW JERSEY	00860/02	1.150	1.065	0.994	1.181
SOUTHERN NEW JERSEY	00860/03	1.096	1.135	1.003	1.112
PHILLY/PITT MED SCHS/HOSPS	00865/01	1.085	1.004	1.014	1.214
LG. PENNSYLVANIA CITIES	00865/02	1.040	0.960	0.946	1.012
SMALL PENNSYLVANIA CITIES	00865/03	0.932	0.988	0.878	0.869
REST OF PENNSYLVANIA	00865/04	0.895	1.018	0.925	0.843
RHODE ISLAND	00870/01	1.078	0.853	0.966	1.074
SOUTH CAROLINA	00880/01	0.899	0.861	0.872	0.848
NORTHEAST RURAL TEXAS	00900/02	0.888	0.968	0.921	0.799
SOUTHEAST RURAL TEXAS	00900/03	0.899	0.881	0.891	0.810
WESTERN RURAL TEXAS	00900/04	0.831	0.877	0.851	0.749
TEMPLE, TX	00900/06	0.871	1.232	0.895	0.809
SAN ANTONIO, TX	00900/07	0.915	1.084	1.154	0.895
TEXARKANA, TX	00900/08	0.821	0.953	1.111	0.876
BRAZORIA, TX	00900/09	0.972	0.835	0.895	0.889
BROWNSVILLE, TX	00900/10	0.822	0.875	0.709	0.690
DALLAS, TX	00900/11	1.017	1.200	1.164	1.118
DENTON, TX	00900/12	1.017	1.180	1.142	0.861

Appendix 3 (continued)

Locality Name	Carrier/ Locality	GPCI	Office-Based MDs Means	Office-Based MDs Medians	All Non-Manufacturing Workers
ODESSA, TX	00900/13	0.842	1.210	0.967	0.848
EL PASO, TX	00900/14	0.890	0.939	1.049	0.781
GALVESTON, TX	00900/15	0.958	0.870	0.679	0.935
GRAYSON, TX	00900/16	0.836	0.759	0.740	0.791
LONGVIEW, TX	00900/17	0.897	0.764	0.833	0.794
HOUSTON, TX	00900/18	1.069	1.254	1.191	1.054
MC ALLEN, TX	00900/19	0.845	1.019	1.008	0.701
BEAUMONT, TX	00900/20	0.971	1.049	1.146	0.851
LUBBOCK, TX	00900/21	0.818	1.368	1.142	0.836
WACO, TX	00900/22	0.863	1.052	1.172	0.794
MIDLAND, TX	00900/23	1.021	0.654	0.725	0.929
CORPUS CHRISTI, TX	00900/24	0.93	1.188	1.111	0.819
ORANGE, TX	00900/25	0.971	1.049	1.146	0.851
AMARILLO, TX	00900/26	0.900	1.480	1.731	0.856
TYLER, TX	00900/27	0.884	1.245	1.296	0.847
FORT WORTH, TX	00900/28	0.946	1.120	1.134	0.975
ABILENE, TX	00900/29	0.840	0.926	1.049	0.784
SAN ANGELO, TX	00900/30	0.791	1.189	1.440	0.778
AUSTIN, TX	00900/31	0.955	0.926	1.031	0.952
VICTORIA, TX	00900/32	0.934	1.362	1.399	0.776
LAREDO, TX	00900/33	0.827	1.703	2.314	0.697
WICHITA FALLS, TX	00900/34	0.806	1.309	0.648	0.767
UTAH	00910/09	0.906	0.900	0.924	0.888
W + SE WA (EXCL SEATTLE)	00930/01	0.941	0.815	0.900	0.975
SEATTLE (KING CNTY), WA	00930/02	1.018	0.954	0.975	1.164
SPOKANE+RICHLND(CITIES)	00930/03	0.933	0.950	0.959	0.971
E.CEN+NE WA (EXCL SPOKANE)	00930/04	0.933	0.950	0.959	0.971
MILWAUKEE, WI	00951/04	0.985	1.031	1.035	1.016
NORTHWEST WISCONSIN	00951/12	0.850	0.739	0.795	0.787
CENTRAL WISCONSIN	00951/13	0.836	0.734	0.775	0.765

Appendix 3 (continued)

Locality Name	Carrier/ Locality	GPCI	Office-Based MDs Means	Office-Based MDs Medians	All Non-Manufacturing Workers
SOUTHWEST WISCONSIN	00951/14	0.836	0.734	0.775	0.765
MADISON, WI (DANE COUNTY)	00951/15	0.959	0.907	0.944	1.012
LA CROSSE, WI (W-CENTRAL)	00951/19	0.892	0.860	0.954	0.838
WAUSAU, WI (N-CENTRAL)	00951/36	0.850	1.000	0.815	0.787
GREEN BAY, WI (NORTHEAST)	00951/40	0.889	0.905	0.948	0.827
MILWAUKEE SUBURBS, WI (SE)	00951/46	0.988	0.916	1.119	0.910
JANESVILLE, WI (S-CENTRAL)	00951/54	0.858	0.850	0.940	0.784
OSHKOSH, WI (E-CENTRAL)	00951/60	0.888	0.888	0.985	0.808
PUERTO RICO	00973/20	0.523	0.580	0.464	0.517
VIRGIN ISLANDS	00973/50	0.864	0.656	0.843	0.831
ALASKA	01020/01	1.242	0.902	0.879	1.366
PHOENIX, AZ	01030/01	1.021	1.079	1.111	0.995
TUCSON (CITY), AZ	01030/02	0.912	1.051	0.925	0.880
FLAGSTAFF (CITY), AZ	01030/05	0.878	0.722	0.730	0.832
PRESCOTT (CITY), AZ	01030/07	0.878	0.722	0.730	0.832
YUMA (CITY), AZ	01030/08	0.938	1.119	1.111	0.871
REST OF ARIZONA	01030/99	0.907	0.859	0.840	0.866
ATLANTA, GA	01040/01	1.032	1.072	1.036	1.128
SMALL GA CITIES 02	01040/02	0.924	1.022	0.977	0.907
SMALL GA CITIES 03	01040/03	0.876	0.998	1.080	0.848
REST OF GEORGIA	01040/04	0.848	0.942	0.995	0.804
HAWAII	01120/01	0.982	0.755	0.799	1.023
LAS VEGAS,ET AL(CITIES),NV	01290/01	1.071	1.253	1.247	0.992
RENO, ET AL (CITIES), NV	01290/02	0.989	0.917	0.731	1.015
ELKO & ELY (CITIES), NV	01290/03	0.947	0.900	0.617	0.949
REST OF NEVADA	01290/99	1.031	1.124	1.028	0.985
NEW MEXICO	01360/05	0.878	0.841	0.767	0.846
OKLAHOMA	01370/00	0.868	0.932	0.934	0.836
PORTLAND,ET AL (CITIES),OR	01380/01	0.981	0.842	0.883	1.046
EUGENE, ET AL (CITIES), OR	01380/02	0.837	0.901	0.899	0.860

Appendix 3 (continued)

Locality Name	Carrier/ Locality	GPCI	Office-Based MDs Means	Office-Based MDs Medians	All Non-Manufacturing Workers
SALEM, ET AL (CITIES), OR	01380/03	0.857	0.907	1.099	0.895
SW OR. CITIES(CITY LIMITS)	01380/12	0.870	0.770	0.791	0.852
REST OF OREGON	01380/99	0.890	0.795	0.847	0.887
SANTA BARBARA, CA	02050/16	1.024	0.942	1.013	1.039
VENTURA, CA	02050/17	1.114	1.517	1.370	1.148
LOS ANGELES, CA (1ST OF 8)	02050/18	1.227	1.213	1.216	1.222
LOS ANGELES, CA (2ND OF 8)	02050/19	1.227	1.213	1.216	1.222
LOS ANGELES, CA (3RD OF 8)	02050/20	1.227	1.213	1.216	1.222
LOS ANGELES, CA (4TH OF 8)	02050/21	1.227	1.213	1.216	1.222
LOS ANGELES, CA (5TH OF 8)	02050/22	1.227	1.213	1.216	1.222
LOS ANGELES, CA (6TH OF 8)	02050/23	1.227	1.213	1.216	1.222
LOS ANGELES, CA (7TH OF 8)	02050/24	1.227	1.213	1.216	1.222
LOS ANGELES, CA (8TH OF 8)	02050/25	1.227	1.213	1.216	1.222
ANAHEIM-SANTA ANA, CA	02050/26	1.150	1.166	1.136	1.191
SAN DIEGO/IMPERIAL, CA	02050/28	1.070	1.069	1.046	1.087
SOUTH IDAHO	05130/11	0.844	0.917	0.849	0.811
NORTH IDAHO	05130/12	0.821	0.850	0.777	0.779
TENNESSEE	05440/35	0.893	0.992	1.019	0.855
URBAN (CITY LIMITS) NC	05535/94	0.875	0.903	0.921	0.874
REST OF NORTH CAROLINA	05535/95	0.875	0.903	0.921	0.874
NW AND N.CENTRAL CONN.	10230/01	1.183	1.050	1.067	1.265
SW CONNECTICUT	10230/02	1.263	1.299	1.241	1.373
SOUTH CENTRAL CONN.	10230/03	1.216	1.174	1.152	1.311
EASTERN CONN.	10230/04	1.134	0.881	0.995	1.148
REST OF MISSISSIPPI	10250/01	0.808	0.966	0.946	0.754
URBAN MS (CITY LIMITS)	10250/02	0.877	1.008	1.026	0.831
RICHMOND+CHARLOTTESVL, VA	10490/01	1.021	0.879	1.026	1.035
TIDEWATER+N. VA COUNTIES	10490/02	1.038	1.050	1.023	1.069
SM. TOWN/INDUSTRIAL VA	10490/03	0.903	0.968	0.907	0.856
REST OF VIRGINIA	10490/04	0.908	0.942	0.876	0.869

Appendix 3 (continued)

Locality Name	Carrier/ Locality	GPCI	Office-Based MDs Means	Office-Based MDs Medians	All Non-Manufacturing Workers
ST. LOUIS/LG. E.CITIES, MO	11260/01	0.961	1.037	1.060	0.980
SMALL E. CITIES	11260/02	0.759	0.919	0.959	0.727
REST OF MO	11260/03	0.772	0.907	0.903	0.742
QUEENS, NY	14330/04	1.316	1.000	1.142	1.363
CLEVELAND, OH	16360/01	0.947	1.048	1.001	0.920
SPRINGFIELD, OH	16360/02	0.947	1.048	1.001	0.920
DAYTON, OH	16360/03	0.947	1.048	1.001	0.920
AKRON, OH	16360/04	0.947	1.048	1.001	0.920
TOLEDO (LUCAS/WOOD), OH	16360/05	0.947	1.048	1.001	0.920
CINCINATI, OH	16360/06	0.947	1.048	1.001	0.920
YOUNGSTOWN, OH	16360/07	0.947	1.048	1.001	0.920
COLUMBUS, OH	16360/08	0.947	1.048	1.001	0.920
SCIOTO VALLEY, OH	16360/09	0.947	1.048	1.001	0.920
E. CENTRAL (STEUBENVL), OH	16360/10	0.947	1.048	1.001	0.920
NORTHWEST (LIMA) OH	16360/11	0.947	1.048	1.001	0.920
SOUTHEAST (OHIO VALLEY) OH	16360/12	0.947	1.048	1.001	0.920
MANSFIELD, OH	16360/13	0.947	1.048	1.001	0.920
MARION + SURR. CNTYS., OH	16360/14	0.947	1.048	1.001	0.920
W. CENTR (LAKE PLAINS), OH	16360/15	0.947	1.048	1.001	0.920
CHARLESTON, WV	16510/16	0.914	1.207	1.116	0.861
WHEELING, WV	16510/17	0.832	1.011	0.961	0.777
EASTERN VALLEY, WV	16510/18	0.823	0.966	1.004	0.790
OHIO RIVER VALLEY, WV	16510/19	0.826	0.966	1.006	0.795
SOUTHERN VALLEY, WV	16510/20	0.811	0.946	0.956	0.788
NORTHERN MAINE	21200/01	0.852	0.797	0.735	0.869
CENTRAL MAINE	21200/02	0.844	0.677	0.666	0.870
SOUTHERN MAINE	21200/03	0.902	0.724	0.735	0.955

Note:
GPCI - -1990 census professional specialty occupations median hourly earnings index, 1-digit occupations, all education sample, metropolitan - wide earnings for counties in MSAs.

Office-Based MDs Means - -1990 census mean hourly earnings of physicians in physicians' offices. All education sample. Metropolitan - wide earnings for counties in MSAs.

Office-Based MDs Medians - -same as preceeding index except uses median hourly earnings.

All Non-Manufacturing Workers - -1990 median hourly earnings of all non-manufacturing workers, all education sample, metropolitan - wide earnings for counties in MSAs.

APPENDIX 4

DIFFERENCE BETWEEN 1996 PHYSICIAN WORK GPCI WEIGHTED BY RELATIVE VALUE UNITS (RVUs) AND POPULATION, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

APPENDIX 4

DIFFERENCE BETWEEN 1996 PHYSICIAN WORK GPCI WEIGHTED BY RELATIVE VALUE UNITS (RVUs) AND POPULATION, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

			FULL VARIATION			QUARTER VARIATION		
Carrier	Locality	Locality Name	RVU Weighted	Population Weighted	Difference	RVU Weighted	Population Weighted	Difference
00820	02	SOUTH DAKOTA	0.739	0.723	0.016	0.935	0.931	0.004
00640	02	NORTHEAST IOWA	0.851	0.836	0.015	0.963	0.959	0.004
00655	00	NEBRASKA	0.800	0.785	0.015	0.950	0.946	0.004
00820	01	NORTH DAKOTA	0.799	0.785	0.015	0.950	0.946	0.004
00650	01	REST OF KANSAS	0.826	0.815	0.012	0.957	0.954	0.003
01030	99	REST OF AZ	0.953	0.941	0.012	0.988	0.985	0.003
00621	11	DECATUR, IL	0.845	0.834	0.011	0.961	0.958	0.003
16360	00	OHIO	0.961	0.950	0.011	0.990	0.987	0.003
21200	03	SOUTHERN MAINE	0.917	0.906	0.011	0.979	0.976	0.003
00640	03	NORTH CENTRAL IOWA	0.820	0.812	0.008	0.955	0.953	0.002
00973	20	PUERTO RICO	0.526	0.519	0.008	0.882	0.880	0.002
01360	05	NEW MEXICO	0.896	0.887	0.008	0.974	0.972	0.002
00520	13	ARKANSAS	0.812	0.805	0.007	0.953	0.951	0.002
00640	01	SOUTHEAST IOWA	0.848	0.841	0.007	0.962	0.960	0.002
01120	01	HAWAII/GUAM	0.993	0.987	0.007	0.998	0.997	0.001
16510	19	OHIO RIVER VALLEY, WV	0.834	0.827	0.007	0.958	0.957	0.001
00510	02	NORTH CENTRAL AL	0.887	0.882	0.005	0.972	0.970	0.002
00640	06	NORTHWEST IOWA	0.782	0.777	0.005	0.946	0.944	0.002
00951	40	GREEN BAY (NORTHEAST), WI	0.898	0.893	0.005	0.975	0.973	0.002
05440	35	TENNESSEE	0.901	0.897	0.005	0.975	0.974	0.001
00621	06	KANKAKEE, IL	0.830	0.826	0.004	0.958	0.956	0.002
00550	01	COLORADO	0.951	0.948	0.004	0.988	0.987	0.001
00621	09	SPRINGFIELD, IL	0.921	0.917	0.004	0.980	0.979	0.001
00621	12	EAST ST. LOUIS, IL	0.949	0.945	0.004	0.987	0.986	0.001
00751	01	MONTANA	0.803	0.799	0.004	0.951	0.950	0.001
00528	06	LAFAYETTE, LA	0.878	0.876	0.003	0.970	0.969	0.001
00580	01	DC +MD/VA SUBURBS	1.199	1.196	0.003	1.050	1.049	0.001
01020	01	ALASKA	1.250	1.247	0.003	1.063	1.062	0.001
00803	02	NYC SUBURBS/LONG I., NY	1.267	1.264	0.002	1.067	1.066	0.001

APPENDIX 4

DIFFERENCE BETWEEN 1996 PHYSICIAN WORK GPCI WEIGHTED BY RELATIVE VALUE UNITS (RVUs) AND POPULATION, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

			FULL VARIATION			QUARTER VARIATION		
Carrier	Locality	Locality Name	RVU Weighted	Population Weighted	Difference	RVU Weighted	Population Weighted	Difference
01370	00	OKLAHOMA	0.874	0.872	0.002	0.969	0.968	0.001
00640	07	SOUTHWEST IOWA	0.809	0.807	0.002	0.952	0.952	0.000
05535	00	NORTH CAROLINA	0.881	0.879	0.002	0.970	0.970	0.000
00510	03	SOUTHEAST AL	0.874	0.873	0.001	0.969	0.968	0.001
00780	50	VERMONT	0.891	0.890	0.001	0.973	0.973	0.000
00951	46	MILWAUKEE SURBURBS (SE), WI	0.957	0.956	0.001	0.989	0.989	0.000
10490	03	SM TOWN/INDUSTRIAL VA	0.892	0.890	0.001	0.973	0.973	0.000
00710	02	MICHIGAN, NOT DETROIT	0.986	0.986	0.000	0.997	0.996	0.001
00720	00	MINNESOTA (TRAVELERS)	0.957	0.957	0.000	0.989	0.989	0.000
10240	00	MINNESOTA (BLUE SHIELD)	0.957	0.957	0.000	0.989	0.989	0.000
00590	01	REST OF FLORIDA	0.881	0.882	0.000	0.970	0.970	0.000
01390	03	E CNTRL & NE WA	0.935	0.937	-0.001	0.984	0.984	0.000
05130	11	SOUTH IDAHO	0.846	0.847	-0.001	0.962	0.962	0.000
16510	16	CHARLESTON, WV	0.917	0.918	-0.001	0.979	0.979	0.000
00910	09	UTAH	0.909	0.910	-0.001	0.977	0.978	-0.001
00951	54	JANESVILLE (S CNTRL), WI	0.860	0.862	-0.002	0.965	0.965	0.000
00542	04	SACRAMENTO/SURR. CNTYS, CA	1.077	1.079	-0.002	1.019	1.020	-0.001
00542	10	MERCED/SURR.CNTYS, CA	1.003	1.006	-0.003	1.001	1.002	-0.001
00621	05	PEORIA, IL	0.915	0.918	-0.003	0.979	0.980	-0.001
00621	08	NORMAL, IL	0.874	0.877	-0.003	0.968	0.969	-0.001
00690	01	BALTIMORE/SURR. CNTYS, MD	1.082	1.085	-0.003	1.020	1.021	-0.001
00825	21	WYOMING	0.868	0.870	-0.003	0.967	0.968	-0.001
00528	50	REST OF LA	0.857	0.861	-0.004	0.964	0.965	-0.001
00803	03	POUGHKPSIE/N NYC SUBURBS, NY	1.040	1.044	-0.004	1.010	1.011	-0.001
01380	01	PORTLAND, ET AL. (CITIES), OR	0.984	0.988	-0.004	0.996	0.997	-0.001
01380	12	SW OR CITIES (CITY LIMITS)	0.865	0.870	-0.004	0.966	0.967	-0.001
21200	01	NORTHERN MAINE	0.852	0.856	-0.004	0.963	0.964	-0.001
00542	12	MONTEREY/SANTA CRUZ, CA	1.029	1.034	-0.005	1.007	1.008	-0.001
00630	03	REST OF IN	0.889	0.894	-0.005	0.972	0.973	-0.001

APPENDIX 4

DIFFERENCE BETWEEN 1996 PHYSICIAN WORK GPCI WEIGHTED BY RELATIVE VALUE UNITS (RVUs) AND POPULATION, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

			FULL VARIATION			QUARTER VARIATION		
Carrier	Locality	Locality Name	RVU Weighted	Population Weighted	Difference	RVU Weighted	Population Weighted	Difference
00801	02	ROCHESTER/SURR. CNTYS, NY	1.042	1.048	-0.005	1.011	1.012	-0.001
00860	01	NORTHERN NJ	1.230	1.236	-0.005	1.058	1.059	-0.001
00880	01	SOUTH CAROLINA	0.900	0.905	-0.005	0.975	0.976	-0.001
01040	02	SMALL GA CITIES 02	0.922	0.927	-0.005	0.980	0.982	-0.002
11260	02	SM E. CITIES, MO	0.758	0.763	-0.005	0.939	0.941	-0.002
00801	01	BUFFALO/SURR. CNTYS, NY	1.006	1.012	-0.006	1.002	1.003	-0.001
00951	60	OSHKOSH (E CNTRL), WI	0.886	0.892	-0.006	0.972	0.973	-0.001
10490	04	REST OF VA	0.900	0.905	-0.006	0.975	0.976	-0.001
00542	01	N. COASTAL CNTYS, CA	1.009	1.015	-0.006	1.002	1.004	-0.002
00590	04	MIAMI, FL	1.060	1.066	-0.006	1.015	1.017	-0.002
00621	15	SUBURBAN CHICAGO, IL	1.025	1.031	-0.006	1.006	1.008	-0.002
00630	01	METROPOLITAN IN	0.951	0.957	-0.007	0.988	0.989	-0.001
00640	04	S CNTRL IA (EXCL. DES MOINES)	0.758	0.765	-0.007	0.940	0.941	-0.001
00860	03	SOUTHERN NJ	1.090	1.097	-0.007	1.023	1.024	-0.001
00528	05	MONROE, LA	0.829	0.836	-0.007	0.957	0.959	-0.002
00542	08	STOCKTON/SURR. CNTYS , CA	1.001	1.008	-0.007	1.000	1.002	-0.002
00542	13	KINGS/TULARE, CA	0.944	0.951	-0.007	0.986	0.988	-0.002
00621	04	ROCK ISLAND, IL	0.883	0.890	-0.007	0.971	0.973	-0.002
00621	07	QUINCY, IL	0.782	0.789	-0.007	0.945	0.947	-0.002
00621	10	CHAMPAIGN-URBANA, IL	0.804	0.811	-0.007	0.951	0.953	-0.002
00621	13	SOUTHEAST IL	0.782	0.789	-0.007	0.945	0.947	-0.002
00621	14	SOUTHERN IL	0.782	0.789	-0.007	0.945	0.947	-0.002
00660	01	LEXINGTON & LOUISVILLE, KY	0.952	0.959	-0.007	0.988	0.990	-0.002
00740	01	ST JOSEPH, MO	0.804	0.811	-0.007	0.951	0.953	-0.002
00900	08	TEXARKANA, TX	0.818	0.825	-0.007	0.954	0.956	-0.002
00900	10	BROWNSVILLE, TX	0.818	0.825	-0.007	0.954	0.956	-0.002
00900	29	ABILENE, TX	0.836	0.843	-0.007	0.959	0.961	-0.002
00900	30	SAN ANGELO, TX	0.788	0.795	-0.007	0.947	0.949	-0.002
00900	34	WICHITA FALLS, TX	0.796	0.804	-0.007	0.949	0.951	-0.002

APPENDIX 4

DIFFERENCE BETWEEN 1996 PHYSICIAN WORK GPCI WEIGHTED BY RELATIVE VALUE UNITS (RVUs) AND POPULATION, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

			FULL VARIATION			QUARTER VARIATION		
Carrier	Locality	Locality Name	RVU Weighted	Population Weighted	Difference	RVU Weighted	Population Weighted	Difference
00951	13	CENTRAL WI	0.832	0.840	-0.007	0.958	0.960	-0.002
00951	14	SOUTHWEST WI	0.832	0.840	-0.007	0.958	0.960	-0.002
01290	02	RENO, ET AL. (CITIES), NV	0.985	0.993	-0.007	0.996	0.998	-0.002
01380	02	EUGENE, ET AL. (CITIES), OR	0.833	0.839	-0.007	0.958	0.960	-0.002
05130	12	NORTH IDAHO	0.823	0.830	-0.007	0.956	0.958	-0.002
16510	20	SOUTHERN VALLEY, WV	0.804	0.811	-0.007	0.951	0.953	-0.002
16510	18	EASTERN VALLEY, WV	0.834	0.842	-0.008	0.959	0.960	-0.001
00510	04	MOBILE, AL	0.895	0.903	-0.008	0.974	0.976	-0.002
00528	02	SHREVEPORT, LA	0.881	0.889	-0.008	0.970	0.972	-0.002
00528	04	LAKE CHARLES, LA	0.894	0.902	-0.008	0.973	0.975	-0.002
00528	07	ALEXANDRIA, LA	0.830	0.837	-0.008	0.957	0.959	-0.002
00700	01	URBAN MASS	1.116	1.123	-0.008	1.029	1.031	-0.002
00900	06	TEMPLE, TX	0.867	0.875	-0.008	0.967	0.969	-0.002
00900	07	SAN ANTONIO, TX	0.908	0.916	-0.008	0.977	0.979	-0.002
00900	09	BRAZORIA, TX	0.968	0.976	-0.008	0.992	0.994	-0.002
00900	12	DENTON, TX	0.870	0.877	-0.008	0.967	0.969	-0.002
00900	14	EL PASO, TX	0.886	0.894	-0.008	0.972	0.974	-0.002
00900	16	GRAYSON, TX	0.832	0.840	-0.008	0.958	0.960	-0.002
00900	17	LONGVIEW, TX	0.889	0.897	-0.008	0.972	0.974	-0.002
00900	19	MC ALLEN, TX	0.841	0.848	-0.008	0.960	0.962	-0.002
00900	21	LUBBOCK, TX	0.815	0.822	-0.008	0.954	0.956	-0.002
00900	22	WACO, TX	0.859	0.867	-0.008	0.965	0.967	-0.002
00900	24	CORPUS CHRISTI, TX	0.927	0.935	-0.008	0.982	0.984	-0.002
00900	26	AMARILLO, TX	0.896	0.904	-0.008	0.974	0.976	-0.002
00900	27	TYLER, TX	0.880	0.888	-0.008	0.970	0.972	-0.002
00900	32	VICTORIA, TX	0.930	0.938	-0.008	0.982	0.984	-0.002
00900	33	LAREDO, TX	0.823	0.831	-0.008	0.956	0.958	-0.002
00973	50	VIRGIN ISLANDS	0.861	0.869	-0.008	0.965	0.967	-0.002
01030	02	TUCSON, AZ	0.908	0.916	-0.008	0.977	0.979	-0.002

APPENDIX 4

DIFFERENCE BETWEEN 1996 PHYSICIAN WORK GPCI WEIGHTED BY RELATIVE VALUE UNITS (RVUs) AND POPULATION, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

			FULL VARIATION			QUARTER VARIATION		
Carrier	Locality	Locality Name	RVU Weighted	Population Weighted	Difference	RVU Weighted	Population Weighted	Difference
01030	05	FLAGSTAFF, AZ	0.882	0.890	-0.008	0.970	0.972	-0.002
01030	07	PRESCOTT, AZ	0.882	0.890	-0.008	0.970	0.972	-0.002
01030	08	YUMA, AZ	0.934	0.942	-0.008	0.983	0.985	-0.002
21200	02	CENTRAL MAINE	0.840	0.848	-0.008	0.960	0.962	-0.002
00900	15	GALVESTON, TX	0.954	0.962	-0.008	0.988	0.991	-0.003
00510	05	BIRMINGHAM, AL	0.972	0.981	-0.009	0.993	0.995	-0.002
00528	01	NEW ORLEANS, LA	0.992	1.001	-0.009	0.998	1.000	-0.002
00528	03	BATON ROUGE, LA	0.933	0.941	-0.009	0.983	0.985	-0.002
00570	01	DELAWARE	1.078	1.087	-0.009	1.020	1.022	-0.002
00640	05	DES MOINES (POLK/WARREN), IA	0.917	0.925	-0.009	0.979	0.981	-0.002
00865	02	LG PA CITIES	1.019	1.028	-0.009	1.005	1.007	-0.002
00900	13	ODESSA, TX	0.958	0.967	-0.009	0.990	0.992	-0.002
00900	20	BEAUMONT, TX	0.967	0.976	-0.009	0.992	0.994	-0.002
00900	23	MIDLAND, TX	0.958	0.967	-0.009	0.990	0.992	-0.002
00900	25	ORANGE, TX	0.967	0.976	-0.009	0.992	0.994	-0.002
00900	28	FORT WORTH, TX	0.950	0.959	-0.009	0.988	0.990	-0.002
00951	04	MILWAUKEE, WI	1.000	1.009	-0.009	1.000	1.002	-0.002
00951	15	MADISON (DANE CNTY), WI	0.955	0.964	-0.009	0.989	0.991	-0.002
01030	01	PHOENIX, AZ	1.010	1.019	-0.009	1.003	1.005	-0.002
01040	01	ATLANTA, GA	1.023	1.033	-0.009	1.006	1.008	-0.002
10230	01	NW AND N. CNTRL CT	1.192	1.201	-0.009	1.048	1.050	-0.002
00510	01	NORTHWEST AL	0.958	0.966	-0.009	0.989	0.992	-0.003
00542	11	FRESNO/MADERA, CA	0.998	1.007	-0.009	0.999	1.002	-0.003
00740	02	N K.C. (CLAY/PLATTE), MO	0.954	0.963	-0.009	0.988	0.991	-0.003
00740	03	K.C. (JACKSON CNTY), MO	0.954	0.963	-0.009	0.988	0.991	-0.003
00740	04	SUBURBAN KANSAS CITY, KANSAS	0.954	0.963	-0.009	0.988	0.991	-0.003
00740	05	KANSAS CITY, KANSAS	0.954	0.963	-0.009	0.988	0.991	-0.003
00865	04	REST OF PA	0.890	0.899	-0.009	0.972	0.975	-0.003
00900	31	AUSTIN, TX	0.946	0.955	-0.009	0.986	0.989	-0.003

OIG

APPENDIX 4

DIFFERENCE BETWEEN 1996 PHYSICIAN WORK GPCI WEIGHTED BY RELATIVE VALUE UNITS (RVUs) AND POPULATION, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

			FULL VARIATION			QUARTER VARIATION		
Carrier	Locality	Locality Name	RVU Weighted	Population Weighted	Difference	RVU Weighted	Population Weighted	Difference
01290	03	ELKO & ELY (CITIES), NV	0.934	0.943	-0.009	0.983	0.986	-0.003
02050	28	SAN DIEGO/IMPERIAL, CA	1.066	1.075	-0.009	1.016	1.019	-0.003
00801	03	N. CENTRAL CITIES, NY	1.015	1.025	-0.010	1.004	1.006	-0.002
00900	04	WESTERN TX	0.818	0.829	-0.010	0.955	0.957	-0.002
00900	11	DALLAS, TX	1.043	1.053	-0.010	1.011	1.013	-0.002
00900	18	HOUSTON, TX	1.079	1.089	-0.010	1.020	1.022	-0.002
01040	04	REST OF GA	0.856	0.865	-0.010	0.964	0.966	-0.002
01290	01	LAS VEGAS, ET AL. (CITIES), NV	1.042	1.052	-0.010	1.011	1.013	-0.002
01390	02	SEATTLE (KING CNTY), WA	1.019	1.029	-0.010	1.005	1.007	-0.002
02050	16	SANTA BARBARA, CA	1.059	1.069	-0.010	1.015	1.017	-0.002
16510	17	WHEELING, WV	0.824	0.834	-0.010	0.956	0.958	-0.002
00542	02	NE RURAL, CA	0.925	0.935	-0.010	0.981	0.984	-0.003
00542	03	MARIN/NAPA/SOLANO, CA	1.057	1.067	-0.010	1.014	1.017	-0.003
00542	14	BAKERSFIELD , CA	1.089	1.099	-0.010	1.022	1.025	-0.003
00542	15	SAN BERNADINO/E.CTRL CNTYS C	1.056	1.066	-0.010	1.014	1.017	-0.003
00542	27	RIVERSIDE, CA	1.042	1.051	-0.010	1.010	1.013	-0.003
01380	03	SALEM, ET AL. (CITIES), OR	0.857	0.866	-0.010	0.964	0.967	-0.003
02050	17	VENTURA, CA	1.110	1.120	-0.010	1.027	1.030	-0.003
11260	03	REST OF MO	0.773	0.783	-0.010	0.943	0.946	-0.003
00542	06	SAN MATEO, CA	1.190	1.202	-0.011	1.048	1.050	-0.002
00542	07	OAKLAND/BERKLEY, CA	1.163	1.174	-0.011	1.041	1.043	-0.002
00590	02	N/NC FL CITIES	0.907	0.918	-0.011	0.977	0.980	-0.003
00621	16	CHICAGO, IL	1.108	1.118	-0.011	1.027	1.030	-0.003
00630	02	URBAN IN	0.894	0.905	-0.011	0.973	0.976	-0.003
00870	01	RHODE ISLAND	1.072	1.083	-0.011	1.018	1.021	-0.003
02050	26	ANAHEIM/SANTA ANA, CA	1.145	1.156	-0.011	1.036	1.039	-0.003
10230	04	EASTERN CT	1.129	1.140	-0.011	1.032	1.035	-0.003
14330	04	QUEENS, NY	1.227	1.239	-0.011	1.057	1.060	-0.003
00951	36	WAUSAU (N CNTRL), WI	0.842	0.854	-0.012	0.961	0.963	-0.002

APPENDIX 4

DIFFERENCE BETWEEN 1996 PHYSICIAN WORK GPCI WEIGHTED BY RELATIVE VALUE UNITS (RVUs) AND POPULATION, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

			FULL VARIATION			QUARTER VARIATION		
Carrier	Locality	Locality Name	RVU Weighted	Population Weighted	Difference	RVU Weighted	Population Weighted	Difference
00542	09	SANTA CLARA, CA	1.251	1.263	-0.012	1.063	1.066	-0.003
00865	03	SM PA CITIES	0.927	0.939	-0.012	0.982	0.985	-0.003
02050	18	LOS ANGELES (1ST OF 8)	1.221	1.233	-0.012	1.055	1.058	-0.003
02050	19	LOS ANGELES (2ND OF 8)	1.221	1.233	-0.012	1.055	1.058	-0.003
02050	20	LOS ANGELES (3RD OF 8)	1.221	1.233	-0.012	1.055	1.058	-0.003
02050	21	LOS ANGELES (4TH OF 8)	1.221	1.233	-0.012	1.055	1.058	-0.003
02050	22	LOS ANGELES (5TH OF 8)	1.221	1.233	-0.012	1.055	1.058	-0.003
02050	23	LOS ANGELES (6TH OF 8)	1.221	1.233	-0.012	1.055	1.058	-0.003
02050	24	LOS ANGELES (7TH OF 8)	1.221	1.233	-0.012	1.055	1.058	-0.003
02050	25	LOS ANGELES (8TH OF 8)	1.221	1.233	-0.012	1.055	1.058	-0.003
10230	03	S. CNTRL CT	1.222	1.233	-0.012	1.055	1.058	-0.003
00542	05	SAN FRANCISCO, CA	1.268	1.281	-0.013	1.067	1.070	-0.003
00621	02	ROCKFORD, IL	0.909	0.922	-0.013	0.977	0.980	-0.003
00951	12	NORTHWEST WI	0.841	0.854	-0.013	0.960	0.963	-0.003
00780	40	NEW HAMPSHIRE	0.950	0.963	-0.013	0.987	0.991	-0.004
00590	03	FORT LAUDERDALE, FL	0.986	1.000	-0.014	0.997	1.000	-0.003
00803	01	MANHATTAN, NY	1.374	1.388	-0.014	1.094	1.097	-0.003
10230	02	SW CT	1.215	1.229	-0.014	1.054	1.057	-0.003
10490	01	RICHMOND & CHARLOTTESVILLE,	1.011	1.025	-0.014	1.003	1.006	-0.003
10490	02	TIDEWATER & N VA CNTYS	0.955	0.969	-0.014	0.989	0.992	-0.003
00860	02	MIDDLE NJ	1.125	1.139	-0.014	1.031	1.035	-0.004
00510	06	REST OF AL	0.850	0.865	-0.015	0.963	0.966	-0.003
01390	01	W & SE WA (EXCL SEATTLE)	0.923	0.939	-0.015	0.981	0.985	-0.004
00865	01	PHILLY/PITT MED SHCLS/HOSPS, P	1.105	1.122	-0.017	1.026	1.030	-0.004
10250	01	REST OF MISSISSIPPI	0.795	0.812	-0.017	0.949	0.953	-0.004
00700	02	MASS SUBURBS/RURAL CITIES	1.055	1.073	-0.018	1.014	1.018	-0.004
01040	03	SMALL GA CITIES 03	0.861	0.880	-0.019	0.965	0.970	-0.005
00710	01	DETROIT, MI	1.170	1.190	-0.020	1.042	1.047	-0.005
00690	03	SOUTH & E. SHORE MD	0.935	0.956	-0.021	0.984	0.989	-0.005

APPENDIX 4

DIFFERENCE BETWEEN 1996 PHYSICIAN WORK GPCI WEIGHTED BY RELATIVE VALUE UNITS (RVUs) AND POPULATION, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

			FULL VARIATION			QUARTER VARIATION		
Carrier	Locality	Locality Name	RVU Weighted	Population Weighted	Difference	RVU Weighted	Population Weighted	Difference
00621	03	DE KALB, IL	0.807	0.829	-0.022	0.952	0.957	-0.005
00900	02	NORTHEAST RURAL TX	0.835	0.857	-0.022	0.959	0.964	-0.005
00660	02	SM CITIES (CITY LIMITS) KY	0.836	0.859	-0.022	0.959	0.965	-0.006
00690	02	WESTERN MD	0.924	0.947	-0.023	0.981	0.987	-0.006
00740	06	RURAL NW COUNTIES, MO	0.795	0.821	-0.025	0.949	0.955	-0.006
00801	04	REST OF NEW YORK	0.950	0.976	-0.026	0.988	0.994	-0.006
00951	19	LA CROSSE (W CNTRL), WI	0.882	0.908	-0.026	0.971	0.977	-0.006
00660	03	REST OF KENTUCKY	0.824	0.851	-0.027	0.956	0.963	-0.007
00900	03	SOUTHEAST RURAL TX	0.849	0.877	-0.028	0.962	0.969	-0.007
00621	01	NORTHWEST, IL	0.800	0.831	-0.031	0.950	0.958	-0.008
10250	02	URBAN MISSISSIPPI	0.852	0.884	-0.032	0.963	0.971	-0.008
11260	01	ST. LOUIS/LG E. CITIES, MO	0.929	0.963	-0.033	0.982	0.991	-0.009
01290	99	REST OF NEVADA	0.983	1.022	-0.039	0.996	1.005	-0.009
01380	99	REST OF OREGON	0.844	0.882	-0.039	0.961	0.971	-0.010

APPENDIX 5

FINAL PHYSICIAN WORK GPCIs BY MEDICARE PAYMENT LOCALITY

APPENDIX 5

FINAL PHYSICIAN WORK GPCIs BY MEDICARE PAYMENT LOCALITY
(sorted alphabetically by state and locality name within state)

Carrier Number	Locality Number	Locality Name	1996 Full Work	1996 Quarter Work	1996 Rescaled Quarter Work	1995 Rescaled Quarter Work	1992 Quarter Work
00510	05	BIRMINGHAM, AL	0.972	0.993	0.994	0.988	0.981
00510	04	MOBILE, AL	0.895	0.974	0.975	0.970	0.964
00510	02	NORTH CENTRAL AL	0.887	0.972	0.973	0.972	0.970
00510	01	NORTHWEST AL	0.958	0.989	0.990	0.988	0.985
00510	06	REST OF AL	0.850	0.963	0.964	0.970	0.975
00510	03	SOUTHEAST AL	0.874	0.969	0.970	0.971	0.972
01020	01	ALASKA	1.250	1.063	1.064	1.085	1.106
01030	05	FLAGSTAFF, AZ	0.882	0.970	0.971	0.977	0.983
01030	01	PHOENIX, AZ	1.010	1.003	1.004	1.004	1.003
01030	07	PRESCOTT, AZ	0.882	0.970	0.971	0.977	0.983
01030	99	REST OF AZ	0.953	0.988	0.989	0.988	0.987
01030	02	TUCSON, AZ	0.908	0.977	0.978	0.982	0.987
01030	08	YUMA, AZ	0.934	0.983	0.984	0.984	0.983
00520	13	ARKANSAS	0.812	0.953	0.954	0.957	0.960
02050	26	ANAHEIM/SANTA ANA, CA	1.145	1.036	1.037	1.042	1.046
00542	14	BAKERSFIELD , CA	1.089	1.022	1.023	1.026	1.028
00542	11	FRESNO/MADERA, CA	0.998	0.999	1.000	1.003	1.006
00542	13	KINGS/TULARE, CA	0.944	0.986	0.987	0.993	0.999
02050	18	LOS ANGELES (1ST OF 8)	1.221	1.055	1.056	1.058	1.060
02050	19	LOS ANGELES (2ND OF 8)	1.221	1.055	1.056	1.058	1.060
02050	20	LOS ANGELES (3RD OF 8)	1.221	1.055	1.056	1.058	1.060
02050	21	LOS ANGELES (4TH OF 8)	1.221	1.055	1.056	1.058	1.060
02050	22	LOS ANGELES (5TH OF 8)	1.221	1.055	1.056	1.058	1.060
02050	23	LOS ANGELES (6TH OF 8)	1.221	1.055	1.056	1.058	1.060
02050	24	LOS ANGELES (7TH OF 8)	1.221	1.055	1.056	1.058	1.060
02050	25	LOS ANGELES (8TH OF 8)	1.221	1.055	1.056	1.058	1.060
00542	03	MARIN/NAPA/SOLANO, CA	1.057	1.014	1.015	1.014	1.012
00542	10	MERCED/SURR.CNTYS, CA	1.003	1.001	1.002	1.010	1.018
00542	12	MONTEREY/SANTA CRUZ, CA	1.029	1.007	1.008	1.016	1.023

APPENDIX 5

FINAL PHYSICIAN WORK GPCIs BY MEDICARE PAYMENT LOCALITY
(sorted alphabetically by state and locality name within state)

Carrier Number	Locality Number	Locality Name	1996 Full Work	1996 Quarter Work	1996 Rescaled Quarter Work	1995 Rescaled Quarter Work	1992 Quarter Work
00542	01	N. COASTAL CNTYS, CA	1.009	1.002	1.003	1.003	1.003
00542	02	NE RURAL, CA	0.925	0.981	0.982	0.992	1.001
00542	07	OAKLAND/BERKLEY, CA	1.163	1.041	1.042	1.035	1.028
00542	27	RIVERSIDE, CA	1.042	1.010	1.011	1.018	1.026
00542	04	SACRAMENTO/SURR. CNTYS, CA	1.077	1.019	1.020	1.023	1.026
00542	15	SAN BERNADINO/E.CTRL CNTYS CA	1.056	1.014	1.015	1.020	1.025
02050	28	SAN DIEGO/IMPERIAL, CA	1.066	1.016	1.017	1.022	1.026
00542	05	SAN FRANCISCO, CA	1.268	1.067	1.068	1.053	1.038
00542	06	SAN MATEO, CA	1.190	1.048	1.049	1.044	1.038
02050	16	SANTA BARBARA, CA	1.059	1.015	1.016	1.014	1.012
00542	09	SANTA CLARA, CA	1.251	1.063	1.064	1.056	1.048
00542	08	STOCKTON/SURR. CNTYS , CA	1.001	1.000	1.001	1.010	1.019
02050	17	VENTURA, CA	1.110	1.027	1.028	1.031	1.034
00550	01	COLORADO	0.951	0.988	0.989	0.994	0.999
10230	04	EASTERN CT	1.129	1.032	1.033	1.016	0.999
10230	01	NW AND N. CNTRL CT	1.192	1.048	1.049	1.026	1.002
10230	03	S. CNTRL CT	1.222	1.055	1.056	1.037	1.018
10230	02	SW CT	1.215	1.054	1.055	1.054	1.053
00570	01	DELAWARE	1.078	1.020	1.021	1.024	1.026
00580	01	DC +MD/VA SUBURBS	1.199	1.050	1.051	1.055	1.059
00590	03	FORT LAUDERDALE, FL	0.986	0.997	0.998	0.996	0.993
00590	04	MIAMI, FL	1.060	1.015	1.016	1.025	1.034
00590	02	N/NC FL CITIES	0.907	0.977	0.978	0.976	0.975
00590	01	REST OF FLORIDA	0.881	0.970	0.971	0.968	0.966
01040	01	ATLANTA, GA	1.023	1.006	1.007	0.991	0.975
01040	04	REST OF GA	0.856	0.964	0.965	0.960	0.956
01040	02	SMALL GA CITIES 02	0.922	0.980	0.981	0.972	0.962
01040	03	SMALL GA CITIES 03	0.861	0.965	0.966	0.964	0.961
01120	01	HAWAII/GUAM	0.993	0.998	0.999	1.001	1.003

APPENDIX 5

FINAL PHYSICIAN WORK GPCIs BY MEDICARE PAYMENT LOCALITY
(sorted alphabetically by state and locality name within state)

Carrier Number	Locality Number	Locality Name	1996 Full Work	1996 Quarter Work	1996 Rescaled Quarter Work	1995 Rescaled Quarter Work	1992 Quarter Work
05130	12	NORTH IDAHO	0.823	0.956	0.957	0.961	0.965
05130	11	SOUTH IDAHO	0.846	0.962	0.963	0.965	0.967
00621	10	CHAMPAIGN-URBANA, IL	0.804	0.951	0.952	0.958	0.965
00621	16	CHICAGO, IL	1.108	1.027	1.028	1.036	1.044
00621	03	DE KALB, IL	0.807	0.952	0.953	0.966	0.978
00621	11	DECATUR, IL	0.845	0.961	0.962	0.972	0.981
00621	12	EAST ST. LOUIS, IL	0.949	0.987	0.988	0.988	0.989
00621	06	KANKAKEE, IL	0.830	0.958	0.959	0.966	0.972
00621	08	NORMAL, IL	0.874	0.968	0.969	0.983	0.997
00621	01	NORTHWEST, IL	0.800	0.950	0.951	0.962	0.974
00621	05	PEORIA, IL	0.915	0.979	0.980	0.994	1.009
00621	07	QUINCY, IL	0.782	0.945	0.946	0.960	0.974
00621	04	ROCK ISLAND, IL	0.883	0.971	0.972	0.984	0.995
00621	02	ROCKFORD, IL	0.909	0.977	0.978	0.994	1.010
00621	13	SOUTHEAST IL	0.782	0.945	0.946	0.960	0.974
00621	14	SOUTHERN IL	0.782	0.945	0.946	0.960	0.974
00621	09	SPRINGFIELD, IL	0.921	0.980	0.981	0.988	0.996
00621	15	SUBURBAN CHICAGO, IL	1.025	1.006	1.007	1.014	1.020
00630	01	METROPOLITAN IN	0.951	0.988	0.989	0.994	0.998
00630	03	REST OF IN	0.889	0.972	0.973	0.976	0.979
00630	02	URBAN IN	0.894	0.973	0.974	0.977	0.980
00640	05	DES MOINES (POLK/WARREN), IA	0.917	0.979	0.980	0.988	0.997
00640	03	NORTH CENTRAL IOWA	0.820	0.955	0.956	0.964	0.971
00640	02	NORTHEAST IOWA	0.851	0.963	0.964	0.968	0.972
00640	06	NORTHWEST IOWA	0.782	0.946	0.947	0.958	0.969
00640	04	S CNTRL IA (EXCL. DES MOINES)	0.758	0.940	0.941	0.952	0.962
00640	01	SOUTHEAST IOWA	0.848	0.962	0.963	0.970	0.976
00640	07	SOUTHWEST IOWA	0.809	0.952	0.953	0.960	0.968
00740	05	KANSAS CITY, KANSAS	0.954	0.988	0.989	0.984	0.978

APPENDIX 5

FINAL PHYSICIAN WORK GPCIs BY MEDICARE PAYMENT LOCALITY
(sorted alphabetically by state and locality name within state)

Carrier Number	Locality Number	Locality Name	1996 Full Work	1996 Quarter Work	1996 Rescaled Quarter Work	1995 Rescaled Quarter Work	1992 Quarter Work
00650	01	REST OF KANSAS	0.826	0.957	0.958	0.956	0.953
00740	04	SUBURBAN KANSAS CITY, KANSAS	0.954	0.988	0.989	0.984	0.978
00660	01	LEXINGTON & LOUISVILLE, KY	0.952	0.988	0.989	0.986	0.984
00660	03	REST OF KENTUCKY	0.824	0.956	0.957	0.966	0.974
00660	02	SM CITIES (CITY LIMITS) KY	0.836	0.959	0.960	0.968	0.976
00528	07	ALEXANDRIA, LA	0.830	0.957	0.958	0.972	0.985
00528	03	BATON ROUGE, LA	0.933	0.983	0.984	0.988	0.991
00528	06	LAFAYETTE, LA	0.878	0.970	0.971	0.976	0.982
00528	04	LAKE CHARLES, LA	0.894	0.973	0.974	0.974	0.975
00528	05	MONROE, LA	0.829	0.957	0.958	0.968	0.979
00528	01	NEW ORLEANS, LA	0.992	0.998	0.999	0.996	0.994
00528	50	REST OF LA	0.857	0.964	0.965	0.968	0.972
00528	02	SHREVEPORT, LA	0.881	0.970	0.971	0.987	1.003
21200	02	CENTRAL MAINE	0.840	0.960	0.961	0.952	0.942
21200	01	NORTHERN MAINE	0.852	0.963	0.964	0.956	0.947
21200	03	SOUTHERN MAINE	0.917	0.979	0.980	0.968	0.956
00690	01	BALTIMORE/SURR. CNTYS, MD	1.082	1.020	1.021	1.024	1.027
00690	03	SOUTH & E. SHORE MD	0.935	0.984	0.985	0.998	1.011
00690	02	WESTERN MD	0.924	0.981	0.982	0.994	1.006
00700	02	MASS SUBURBS/RURAL CITIES	1.055	1.014	1.015	1.006	0.997
00700	01	URBAN MASS	1.116	1.029	1.030	1.016	1.002
00710	01	DETROIT, MI	1.170	1.042	1.043	1.051	1.059
00710	02	MICHIGAN, NOT DETROIT	0.986	0.997	0.998	1.004	1.010
00720	00	MINNESOTA (BLUE SHIELD)	0.957	0.989	0.990	0.994	0.999
10240	00	MINNESOTA (TRAVELERS)	0.957	0.989	0.990	0.994	0.999
10250	01	REST OF MISSISSIPPI	0.795	0.949	0.950	0.955	0.960
10250	02	URBAN MISSISSIPPI	0.852	0.963	0.964	0.965	0.966
00740	03	K.C. (JACKSON CNTY), MO	0.954	0.988	0.989	0.984	0.978
00740	02	N K.C. (CLAY/PLATTE), MO	0.954	0.988	0.989	0.984	0.978

APPENDIX 5

FINAL PHYSICIAN WORK GPCIs BY MEDICARE PAYMENT LOCALITY
(sorted alphabetically by state and locality name within state)

Carrier Number	Locality Number	Locality Name	1996 Full Work	1996 Quarter Work	1996 Rescaled Quarter Work	1995 Rescaled Quarter Work	1992 Quarter Work
11260	03	REST OF MO	0.773	0.943	0.944	0.947	0.950
00740	06	RURAL NW COUNTIES, MO	0.795	0.949	0.950	0.952	0.953
11260	02	SM E. CITIES, MO	0.758	0.939	0.940	0.947	0.954
00740	01	ST JOSEPH, MO	0.804	0.951	0.952	0.951	0.950
11260	01	ST. LOUIS/LG E. CITIES, MO	0.929	0.982	0.983	0.986	0.988
00751	01	MONTANA	0.803	0.951	0.952	0.960	0.967
00655	00	NEBRASKA	0.800	0.950	0.951	0.956	0.960
01290	03	ELKO & ELY (CITIES), NV	0.934	0.983	0.984	0.984	0.984
01290	01	LAS VEGAS, ET AL. (CITIES), NV	1.042	1.011	1.012	1.024	1.036
01290	02	RENO, ET AL. (CITIES), NV	0.985	0.996	0.997	1.002	1.008
01290	99	REST OF NEVADA	0.983	0.996	0.997	1.008	1.020
00780	40	NEW HAMPSHIRE	0.950	0.987	0.988	0.975	0.962
00860	02	MIDDLE NJ	1.125	1.031	1.032	1 033	1.034
00860	01	NORTHERN NJ	1.230	1.058	1.059	1.050	1.040
00860	03	SOUTHERN NJ	1.090	1.023	1.024	1.020	1.016
01360	05	NEW MEXICO	0.896	0.974	0.975	0.978	0.981
00801	01	BUFFALO/SURR. CNTYS, NY	1.006	1.002	1.003	1.004	1.006
00803	01	MANHATTAN, NY	1.374	1.094	1.095	1.077	1.059
00801	03	N. CENTRAL CITIES, NY	1.015	1.004	1.005	1.001	0.997
00803	02	NYC SUBURBS/LONG I., NY	1.267	1.067	1.068	1.064	1.060
00803	03	POUGHKPSIE/N NYC SUBURBS, NY	1.040	1.010	1.011	1.008	1.004
14330	04	QUEENS, NY	1.227	1.057	1.058	1.058	1.059
00801	04	REST OF NEW YORK	0.950	0.988	0.989	0.988	0.988
00801	02	ROCHESTER/SURR. CNTYS, NY	1.042	1.011	1.012	1.016	1.021
05535	00	NORTH CAROLINA	0.881	0.970	0.971	0.970	0.968
00820	01	NORTH DAKOTA	0.799	0.950	0.951	0.958	0.965
16360	00	OHIO	0.961	0.990	0.991	0.992	0.993
01370	00	OKLAHOMA	0.874	0.969	0.970	0.970	0.969
01380	02	EUGENE, ET AL. (CITIES), OR	0.833	0.958	0.959	0.964	0.968

APPENDIX 5

FINAL PHYSICIAN WORK GPCIs BY MEDICARE PAYMENT LOCALITY
(sorted alphabetically by state and locality name within state)

Carrier Number	Locality Number	Locality Name	1996 Full Work	1996 Quarter Work	1996 Rescaled Quarter Work	1995 Rescaled Quarter Work	1992 Quarter Work
01380	01	PORTLAND, ET AL. (CITIES), OR	0.984	0.996	0.997	0.995	0.993
01380	99	REST OF OREGON	0.844	0.961	0.962	0.970	0.979
01380	03	SALEM, ET AL. (CITIES), OR	0.857	0.964	0.965	0.970	0.974
01380	12	SW OR CITIES (CITY LIMITS)	0.865	0.966	0.967	0.970	0.974
00865	02	LG PA CITIES	1.019	1.005	1.006	1.007	1.008
00865	01	PHILLY/PITT MED SHCLS/HOSPS, PA	1.105	1.026	1.027	1.020	1.014
00865	04	REST OF PA	0.890	0.972	0.973	0.974	0.975
00865	03	SM PA CITIES	0.927	0.982	0.983	0.984	0.984
00973	20	PUERTO RICO	0.526	0.882	0.883	0.882	0.882
00870	01	RHODE ISLAND	1.072	1.018	1.019	1.014	1.009
00880	01	SOUTH CAROLINA	0.900	0.975	0.976	0.974	0.971
00820	02	SOUTH DAKOTA	0.739	0.935	0.936	0.944	0.951
05440	35	TENNESSEE	0.901	0.975	0.976	0.972	0.969
00900	29	ABILENE, TX	0.836	0.959	0.960	0.966	0.971
00900	26	AMARILLO, TX	0.896	0.974	0.975	0.974	0.972
00900	31	AUSTIN, TX	0.946	0.986	0.987	0.978	0.969
00900	20	BEAUMONT, TX	0.967	0.992	0.993	0.996	0.998
00900	09	BRAZORIA, TX	0.968	0.992	0.993	1.009	1.025
00900	10	BROWNSVILLE, TX	0.818	0.954	0.955	0.968	0.980
00900	24	CORPUS CHRISTI, TX	0.927	0.982	0.983	0.980	0.976
00900	11	DALLAS, TX	1.043	1.011	1.012	1.004	0.996
00900	12	DENTON, TX	0.870	0.967	0.968	0.982	0.996
00900	14	EL PASO, TX	0.886	0.972	0.973	0.984	0.995
00900	28	FORT WORTH, TX	0.950	0.988	0.989	0.981	0.973
00900	15	GALVESTON, TX	0.954	0.988	0.989	0.986	0.982
00900	16	GRAYSON, TX	0.832	0.958	0.959	0.962	0.964
00900	18	HOUSTON, TX	1.079	1.020	1.021	1.018	1.014
00900	33	LAREDO, TX	0.823	0.956	0.957	0.962	0.968
00900	17	LONGVIEW, TX	0.889	0.972	0.973	0.970	0.968

APPENDIX 5

FINAL PHYSICIAN WORK GPCIs BY MEDICARE PAYMENT LOCALITY
(sorted alphabetically by state and locality name within state)

Carrier Number	Locality Number	Locality Name	1996 Full Work	1996 Quarter Work	1996 Rescaled Quarter Work	1995 Rescaled Quarter Work	1992 Quarter Work
00900	21	LUBBOCK, TX	0.815	0.954	0.955	0.952	0.950
00900	19	MC ALLEN, TX	0.841	0.960	0.961	0.953	0.945
00900	23	MIDLAND, TX	0.958	0.990	0.991	1.007	1.023
00900	02	NORTHEAST RURAL TX	0.835	0.959	0.960	0.964	0.968
00900	13	ODESSA, TX	0.958	0.990	0.991	1.000	1.008
00900	25	ORANGE, TX	0.967	0.992	0.993	0.996	0.998
00900	30	SAN ANGELO, TX	0.788	0.947	0.948	0.951	0.954
00900	07	SAN ANTONIO, TX	0.908	0.977	0.978	0.976	0.973
00900	03	SOUTHEAST RURAL TX	0.849	0.962	0.963	0.968	0.973
00900	06	TEMPLE, TX	0.867	0.967	0.968	0.968	0.969
00900	08	TEXARKANA, TX	0.818	0.954	0.955	0.954	0.953
00900	27	TYLER, TX	0.880	0.970	0.971	0.978	0.984
00900	32	VICTORIA, TX	0.930	0.982	0.983	0.980	0.976
00900	22	WACO, TX	0.859	0.965	0.966	0.974	0.981
00900	04	WESTERN TX	0.818	0.955	0.956	0.958	0.961
00900	34	WICHITA FALLS, TX	0.796	0.949	0.950	0.960	0.969
00910	09	UTAH	0.909	0.977	0.978	0.986	0.993
00780	50	VERMONT	0.891	0.973	0.974	0.958	0.942
00973	50	VIRGIN ISLANDS	0.861	0.965	0.966	0.983	1.000
10490	04	REST OF VA	0.900	0.975	0.976	0.972	0.967
10490	01	RICHMOND & CHARLOTTESVILLE, VA	1.011	1.003	1.004	0.990	0.975
10490	03	SM TOWN/INDUSTRIAL VA	0.892	0.973	0.974	0.972	0.971
10490	02	TIDEWATER & N VA CNTYS	0.955	0.989	0.990	0.990	0.989
01390	03	E CNTRL & NE WA	0.935	0.984	0.985	0.990	0.996
01390	02	SEATTLE (KING CNTY), WA	1.019	1.005	1.006	1.012	1.019
01390	01	W & SE WA (EXCL SEATTLE)	0.923	0.981	0.982	0.995	1.008
16510	16	CHARLESTON, WV	0.917	0.979	0.980	0.984	0.987
16510	18	EASTERN VALLEY, WV	0.834	0.959	0.960	0.961	0.962
16510	19	OHIO RIVER VALLEY, WV	0.834	0.958	0.959	0.960	0.962

APPENDIX 5

FINAL PHYSICIAN WORK GPCIs BY MEDICARE PAYMENT LOCALITY
(sorted alphabetically by state and locality name within state)

Carrier Number	Locality Number	Locality Name	1996 Full Work	1996 Quarter Work	1996 Rescaled Quarter Work	1995 Rescaled Quarter Work	1992 Quarter Work
16510	20	SOUTHERN VALLEY, WV	0.804	0.951	0.952	0.956	0.960
16510	17	WHEELING, WV	0.824	0.956	0.957	0.966	0.975
00951	13	CENTRAL WI	0.832	0.958	0.959	0.960	0.960
00951	40	GREEN BAY (NORTHEAST), WI	0.898	0.975	0.976	0.978	0.979
00951	54	JANESVILLE (S CNTRL), WI	0.860	0.965	0.966	0.968	0.970
00951	19	LA CROSSE (W CNTRL), WI	0.882	0.971	0.972	0.974	0.976
00951	15	MADISON (DANE CNTY), WI	0.955	0.989	0.990	0.984	0.977
00951	46	MILWAUKEE SUBURBS (SE), WI	0.957	0.989	0.990	1.000	1.010
00951	04	MILWAUKEE, WI	1.000	1.000	1.001	1.004	1.008
00951	12	NORTHWEST WI	0.841	0.960	0.961	0.964	0.966
00951	60	OSHKOSH (E CNTRL), WI	0.886	0.972	0.973	0.974	0.974
00951	14	SOUTHWEST WI	0.832	0.958	0.959	0.960	0.960
00951	36	WAUSAU (N CNTRL), WI	0.842	0.961	0.962	0.966	0.971
00825	21	WYOMING	0.868	0.967	0.968	0.978	0.988

APPENDIX 6

DIFFERENCE BETWEEN 1996 RESCALED PHYSICIAN WORK GPCI AND 1992 PHYSICIAN WORK GPCI, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

APPENDIX 6

DIFFERENCE BETWEEN 1996 RESCALED PHYSICIAN WORK GPCI AND 1992 PHYSICIAN WORK GPCI, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

Carrier Number	Locality Number	Locality Name	1996 Rescaled Quarter Work	1992 Quarter Work	Change	Percent Change
10230	01	NW AND N. CNTRL CT	1.049	1.002	0.047	4.7 %
10230	03	S. CNTRL CT	1.056	1.018	0.038	3.7
00803	01	MANHATTAN, NY	1.095	1.059	0.036	3.4
10230	04	EASTERN CT	1.033	0.999	0.034	3.4
01040	01	ATLANTA, GA	1.007	0.975	0.032	3.3
00780	50	VERMONT	0.974	0.942	0.032	3.4
00542	05	SAN FRANCISCO, CA	1.068	1.038	0.030	2.9
10490	01	RICHMOND & CHARLOTTESVILLE, VA	1.004	0.975	0.029	3.0
00700	01	URBAN MASS	1.030	1.002	0.028	2.8
00780	40	NEW HAMPSHIRE	0.988	0.962	0.026	2.7
21200	03	SOUTHERN MAINE	0.980	0.956	0.024	2.5
01040	02	SMALL GA CITIES 02	0.981	0.962	0.019	2.0
21200	02	CENTRAL MAINE	0.961	0.942	0.019	2.0
00860	01	NORTHERN NJ	1.059	1.040	0.019	1.8
00700	02	MASS SUBURBS/RURAL CITIES	1.015	0.997	0.018	1.8
00900	31	AUSTIN, TX	0.987	0.969	0.018	1.9
21200	01	NORTHERN MAINE	0.964	0.947	0.017	1.8
00542	09	SANTA CLARA, CA	1.064	1.048	0.016	1.5
00900	11	DALLAS, TX	1.012	0.996	0.016	1.6
00900	28	FORT WORTH, TX	0.989	0.973	0.016	1.6
00900	19	MC ALLEN, TX	0.961	0.945	0.016	1.7
00542	07	OAKLAND/BERKLEY, CA	1.042	1.028	0.014	1.4
00510	05	BIRMINGHAM, AL	0.994	0.981	0.013	1.3
00865	01	PHILLY/PITT MED SHCLS/HOSPS, PA	1.027	1.014	0.013	1.3
00951	15	MADISON (DANE CNTY), WI	0.990	0.977	0.013	1.3
00510	04	MOBILE, AL	0.975	0.964	0.011	1.1
00542	06	SAN MATEO, CA	1.049	1.038	0.011	1.1
00740	05	KANSAS CITY, KANSAS	0.989	0.978	0.011	1.1
00740	04	SUBURBAN KANSAS CITY, KANSAS	0.989	0.978	0.011	1.1
00740	03	K.C. (JACKSON CNTY), MO	0.989	0.978	0.011	1.1
00740	02	N K.C. (CLAY/PLATTE), MO	0.989	0.978	0.011	1.1
00870	01	RHODE ISLAND	1.019	1.009	0.010	1.0
01040	04	REST OF GA	0.965	0.956	0.009	0.9
10490	04	REST OF VA	0.976	0.967	0.009	0.9
00860	03	SOUTHERN NJ	1.024	1.016	0.008	0.8
00801	03	N. CENTRAL CITIES, NY	1.005	0.997	0.008	0.8
00803	02	NYC SUBURBS/LONG I., NY	1.068	1.060	0.008	0.8
00803	03	POUGHKPSIE/N NYC SUBURBS, NY	1.011	1.004	0.007	0.7
05440	35	TENNESSEE	0.976	0.969	0.007	0.7
00900	24	CORPUS CHRISTI, TX	0.983	0.976	0.007	0.7
00900	15	GALVESTON, TX	0.989	0.982	0.007	0.7
00900	18	HOUSTON, TX	1.021	1.014	0.007	0.7
00900	32	VICTORIA, TX	0.983	0.976	0.007	0.7

gpci\physrpt\APP6.XLS

APPENDIX 6

DIFFERENCE BETWEEN 1996 RESCALED PHYSICIAN WORK GPCI AND 1992 PHYSICIAN WORK GPCI, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

Carrier Number	Locality Number	Locality Name	1996 Rescaled Quarter Work	1992 Quarter Work	Change	Percent Change
00510	01	NORTHWEST AL	0.990	0.985	0.005	0.5
00590	03	FORT LAUDERDALE, FL	0.998	0.993	0.005	0.5
00590	01	REST OF FLORIDA	0.971	0.966	0.005	0.5
01040	03	SMALL GA CITIES 03	0 966	0.961	0.005	0.5
00650	01	REST OF KANSAS	0.958	0.953	0.005	0.5
00660	01	LEXINGTON & LOUISVILLE, KY	0.989	0.984	0.005	0.5
00528	01	NEW ORLEANS, LA	0.999	0.994	0.005	0.5
00880	01	SOUTH CAROLINA	0.976	0.971	0.005	0.5
00900	17	LONGVIEW, TX	0.973	0.968	0.005	0.5
00900	21	LUBBOCK, TX	0.955	0.950	0.005	0.5
00900	07	SAN ANTONIO, TX	0.978	0.973	0.005	0.5
02050	16	SANTA BARBARA, CA	1.016	1.012	0.004	0.0
01380	01	PORTLAND, ET AL. (CITIES), OR	0.997	0.993	0.004	0.4
00510	02	NORTH CENTRAL AL	0.973	0.970	0.003	0.3
00542	03	MARIN/NAPA/SOLANO, CA	1.015	1.012	0.003	0.3
00590	02	N/NC FL CITIES	0.978	0.975	0.003	0.3
05535	00	NORTH CAROLINA	0.971	0.968	0.003	0.3
00900	26	AMARILLO, TX	0.975	0.972	0.003	0.3
10490	03	SM TOWN/INDUSTRIAL VA	0.974	0.971	0.003	0.3
01030	99	REST OF AZ	0.989	0.987	0.002	0.2
10230	02	SW CT	1.055	1.053	0.002	0.2
00740	01	ST JOSEPH, MO	0.952	0.950	0.002	0.2
00900	08	TEXARKANA, TX	0.955	0.953	0.002	0.2
01030	01	PHOENIX, AZ	1.004	1.003	0.001	0.1
01030	08	YUMA, AZ	0.984	0.983	0.001	0.1
00801	04	REST OF NEW YORK	0.989	0.988	0.001	0.1
01370	00	OKLAHOMA	0.970	0.969	0.001	0.1
00973	20	PUERTO RICO	0.883	0.882	0.001	0.1
10490	02	TIDEWATER & N VA CNTYS	0.990	0.989	0.001	0.1
00542	01	N. COASTAL CNTYS, CA	1.003	1.003	0.000	0.0
01290	03	ELKO & ELY (CITIES), NV	0.984	0.984	0.000	0.0
00621	12	EAST ST. LOUIS, IL	0.988	0.989	-0.001	-0.1
00528	04	LAKE CHARLES, LA	0.974	0.975	-0.001	-0.1
14330	04	QUEENS, NY	1.058	1.059	-0.001	-0.1
00865	03	SM PA CITIES	0.983	0.984	-0.001	-0.1
00900	06	TEMPLE, TX	0.968	0.969	-0.001	-0.1
00951	13	CENTRAL WI	0.959	0.960	-0.001	-0.1
00951	60	OSHKOSH (E CNTRL), WI	0.973	0.974	-0.001	-0.1
00951	14	SOUTHWEST WI	0.959	0.960	-0.001	-0.1
00510	03	SOUTHEAST AL	0.970	0.972	-0.002	-0.2
10250	02	URBAN MISSISSIPPI	0.964	0.966	-0.002	-0.2
00860	02	MIDDLE NJ	1.032	1.034	-0.002	-0.2
16360	00	OHIO	0.991	0.993	-0.002	-0.2

gpci\physrpt\APP6.XLS

APPENDIX 6

DIFFERENCE BETWEEN 1996 RESCALED PHYSICIAN WORK GPCI AND 1992 PHYSICIAN WORK GPCI, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

Carrier Number	Locality Number	Locality Name	1996 Rescaled Quarter Work	1992 Quarter Work	Change	Percent Change
00865	02	LG PA CITIES	1.006	1.008	-0.002	-0.2
00865	04	REST OF PA	0.973	0.975	-0.002	-0.2
16510	18	EASTERN VALLEY, WV	0.960	0.962	-0.002	-0.2
00740	06	RURAL NW COUNTIES, MO	0.950	0.953	-0.003	-0.3
00801	01	BUFFALO/SURR. CNTYS, NY	1.003	1.006	-0.003	-0.3
16510	19	OHIO RIVER VALLEY, WV	0.959	0.962	-0.003	-0.3
00951	40	GREEN BAY (NORTHEAST), WI	0.976	0.979	-0.003	-0.3
02050	18	LOS ANGELES (1ST OF 8)	1.056	1.060	-0.004	-0.4
02050	19	LOS ANGELES (2ND OF 8)	1.056	1.060	-0.004	-0.4
02050	20	LOS ANGELES (3RD OF 8)	1.056	1.060	-0.004	-0.4
02050	21	LOS ANGELES (4TH OF 8)	1.056	1.060	-0.004	-0.4
02050	22	LOS ANGELES (5TH OF 8)	1.056	1.060	-0.004	-0.4
02050	23	LOS ANGELES (6TH OF 8)	1.056	1.060	-0.004	-0.4
02050	24	LOS ANGELES (7TH OF 8)	1.056	1.060	-0.004	-0.4
02050	25	LOS ANGELES (8TH OF 8)	1.056	1.060	-0.004	-0.4
01120	01	HAWAII/GUAM	0.999	1.003	-0.004	-0.4
05130	11	SOUTH IDAHO	0.963	0.967	-0.004	-0.4
00951	54	JANESVILLE (S CNTRL), WI	0.966	0.970	-0.004	-0.4
00951	19	LA CROSSE (W CNTRL), WI	0.972	0.976	-0.004	-0.4
00542	14	BAKERSFIELD , CA	1.023	1.028	-0.005	-0.5
00570	01	DELAWARE	1.021	1.026	-0.005	-0.5
11260	01	ST. LOUIS/LG E. CITIES, MO	0.983	0.988	-0.005	-0.5
00900	20	BEAUMONT, TX	0.993	0.998	-0.005	0.0
00900	16	GRAYSON, TX	0.959	0.964	-0.005	-0.5
00900	25	ORANGE, TX	0.993	0.998	-0.005	-0.5
00900	04	WESTERN TX	0.956	0.961	-0.005	-0.5
00951	12	NORTHWEST WI	0.961	0.966	-0.005	-0.5
00520	13	ARKANSAS	0.954	0.960	-0.006	-0.6
00542	11	FRESNO/MADERA, CA	1.000	1.006	-0.006	-0.6
00542	04	SACRAMENTO/SURR. CNTYS, CA	1.020	1.026	-0.006	-0.6
02050	17	VENTURA, CA	1.028	1.034	-0.006	-0.6
00630	03	REST OF IN	0.973	0.979	-0.006	-0.6
00630	02	URBAN IN	0.974	0.980	-0.006	-0.6
00690	01	BALTIMORE/SURR. CNTYS, MD	1.021	1.027	-0.006	-0.6
11260	03	REST OF MO	0.944	0.950	-0.006	-0.6
01360	05	NEW MEXICO	0.975	0.981	-0.006	-0.6
00900	30	SAN ANGELO, TX	0.948	0.954	-0.006	-0.6
00528	03	BATON ROUGE, LA	0.984	0.991	-0.007	-0.7
00528	50	REST OF LA	0.965	0.972	-0.007	-0.7
01380	12	SW OR CITIES (CITY LIMITS)	0.967	0.974	-0.007	-0.7
16510	16	CHARLESTON, WV	0.980	0.987	-0.007	-0.7
00951	04	MILWAUKEE, WI	1.001	1.008	-0.007	-0.7
00580	01	DC +MD/VA SUBURBS	1.051	1.059	-0.008	-0.8

APPENDIX 6

DIFFERENCE BETWEEN 1996 RESCALED PHYSICIAN WORK GPCI AND 1992 PHYSICIAN WORK GPCI, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

Carrier Number	Locality Number	Locality Name	1996 Rescaled Quarter Work	1992 Quarter Work	Change	Percent Change
05130	12	NORTH IDAHO	0.957	0.965	-0.008	-0.8
00640	02	NORTHEAST IOWA	0.964	0.972	-0.008	-0.8
00900	02	NORTHEAST RURAL TX	0.960	0.968	-0.008	-0.8
16510	20	SOUTHERN VALLEY, WV	0.952	0.960	-0.008	-0.8
01030	02	TUCSON, AZ	0.978	0.987	-0.009	-0.9
02050	26	ANAHEIM/SANTA ANA, CA	1.037	1.046	-0.009	-0.9
02050	28	SAN DIEGO/IMPERIAL, CA	1.017	1.026	-0.009	-0.9
00630	01	METROPOLITAN IN	0.989	0.998	-0.009	-0.9
00720	00	MINNESOTA (BLUE SHIELD)	0.990	0.999	-0.009	-0.9
10240	00	MINNESOTA (TRAVELERS)	0.990	0.999	-0.009	-0.9
00655	00	NEBRASKA	0.951	0.960	-0.009	-0.9
00801	02	ROCHESTER/SURR. CNTYS, NY	1.012	1.021	-0.009	-0.9
01380	02	EUGENE, ET AL. (CITIES), OR	0.959	0.968	-0.009	-0.9
01380	03	SALEM, ET AL. (CITIES), OR	0.965	0.974	-0.009	-0.9
00951	36	WAUSAU (N CNTRL), WI	0.962	0.971	-0.009	-0.9
00542	15	SAN BERNADINO/E.CTRL CNTYS CA	1.015	1.025	-0.010	-1.0
00550	01	COLORADO	0.989	0.999	-0.010	-1.0
10250	01	REST OF MISSISSIPPI	0.950	0.960	-0.010	-1.0
00900	03	SOUTHEAST RURAL TX	0.963	0.973	-0.010	-1.0
00510	06	REST OF AL	0.964	0.975	-0.011	-1.1
00528	06	LAFAYETTE, LA	0.971	0.982	-0.011	-1.1
01290	02	RENO, ET AL. (CITIES), NV	0.997	1.008	-0.011	-1.1
00900	29	ABILENE, TX	0.960	0.971	-0.011	-1.1
00900	33	LAREDO, TX	0.957	0.968	-0.011	-1.1
01390	03	E CNTRL & NE WA	0.985	0.996	-0.011	-1.1
01030	05	FLAGSTAFF, AZ	0.971	0.983	-0.012	-1.2
01030	07	PRESCOTT, AZ	0.971	0.983	-0.012	-1.2
00542	13	KINGS/TULARE, CA	0.987	0.999	-0.012	-1.2
00710	02	MICHIGAN, NOT DETROIT	0.998	1.010	-0.012	-1.2
00621	10	CHAMPAIGN-URBANA, IL	0.952	0.965	-0.013	-1.3
00621	06	KANKAKEE, IL	0.959	0.972	-0.013	-1.3
00621	15	SUBURBAN CHICAGO, IL	1.007	1.020	-0.013	-1.3
00640	01	SOUTHEAST IOWA	0.963	0.976	-0.013	-1.3
00900	27	TYLER, TX	0.971	0.984	-0.013	0.0
01390	02	SEATTLE (KING CNTY), WA	1.006	1.019	-0.013	-1.3
11260	02	SM E. CITIES, MO	0.940	0.954	-0.014	-1.5
00820	01	NORTH DAKOTA	0.951	0.965	-0.014	-1.5
00542	12	MONTEREY/SANTA CRUZ, CA	1.008	1.023	-0.015	-1.5
00542	27	RIVERSIDE, CA	1.011	1.026	-0.015	-1.5
00621	09	SPRINGFIELD, IL	0.981	0.996	-0.015	-1.5
00640	03	NORTH CENTRAL IOWA	0.956	0.971	-0.015	-1.5
00640	07	SOUTHWEST IOWA	0.953	0.968	-0.015	-1.5
00751	01	MONTANA	0.952	0.967	-0.015	-1.6

gpci\physrpt\APP6.XLS

APPENDIX 6

DIFFERENCE BETWEEN 1996 RESCALED PHYSICIAN WORK GPCI AND 1992 PHYSICIAN WORK GPCI, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

Carrier Number	Locality Number	Locality Name	1996 Rescaled Quarter Work	1992 Quarter Work	Change	Percent Change
00820	02	SOUTH DAKOTA	0.936	0.951	-0.015	-1.6
00900	22	WACO, TX	0.966	0.981	-0.015	-1.5
00910	09	UTAH	0.978	0.993	-0.015	-1.5
00542	10	MERCED/SURR.CNTYS, CA	1.002	1.018	-0.016	-1.6
00621	16	CHICAGO, IL	1.028	1.044	-0.016	-1.5
00660	02	SM CITIES (CITY LIMITS) KY	0.960	0.976	-0.016	-1.6
00710	01	DETROIT, MI	1.043	1.059	-0.016	-1.5
00640	05	DES MOINES (POLK/WARREN), IA	0.980	0.997	-0.017	-1.7
00660	03	REST OF KENTUCKY	0.957	0.974	-0.017	-1.7
01380	99	REST OF OREGON	0.962	0.979	-0.017	-1.7
00900	13	ODESSA, TX	0.991	1.008	-0.017	-1.7
00542	08	STOCKTON/SURR. CNTYS , CA	1.001	1.019	-0.018	-1.8
00590	04	MIAMI, FL	1.016	1.034	-0.018	-1.7
16510	17	WHEELING, WV	0.957	0.975	-0.018	-1.8
00542	02	NE RURAL, CA	0.982	1.001	-0.019	-1.9
00621	11	DECATUR, IL	0.962	0.981	-0.019	-1.9
00900	34	WICHITA FALLS, TX	0.950	0.969	-0.019	-2.0
00951	46	MILWAUKEE SUBURBS (SE), WI	0.990	1.010	-0.020	-2.0
00825	21	WYOMING	0.968	0.988	-0.020	-2.0
00640	04	S CNTRL IA (EXCL. DES MOINES)	0.941	0.962	-0.021	-2.2
00528	05	MONROE, LA	0.958	0.979	-0.021	-2.1
00640	06	NORTHWEST IOWA	0.947	0.969	-0.022	-2.3
00900	14	EL PASO, TX	0.973	0.995	-0.022	-2.2
00621	01	NORTHWEST, IL	0.951	0.974	-0.023	-2.4
00621	04	ROCK ISLAND, IL	0.972	0.995	-0.023	-2.3
01290	99	REST OF NEVADA	0.997	1.020	-0.023	-2.3
00690	02	WESTERN MD	0.982	1.006	-0.024	-2.4
01290	01	LAS VEGAS, ET AL. (CITIES), NV	1.012	1.036	-0.024	-2.3
00621	03	DE KALB, IL	0.953	0.978	-0.025	-2.6
00900	10	BROWNSVILLE, TX	0.955	0.980	-0.025	-2.6
00690	03	SOUTH & E. SHORE MD	0.985	1.011	-0.026	-2.6
01390	01	W & SE WA (EXCL SEATTLE)	0.982	1.008	-0.026	-2.6
00528	07	ALEXANDRIA, LA	0.958	0.985	-0.027	-2.7
00621	08	NORMAL, IL	0.969	0.997	-0.028	-2.8
00621	07	QUINCY, IL	0.946	0.974	-0.028	-2.9
00621	13	SOUTHEAST IL	0.946	0.974	-0.028	-2.9
00621	14	SOUTHERN IL	0.946	0.974	-0.028	-2.9
00900	12	DENTON, TX	0.968	0.996	-0.028	-2.8
00621	05	PEORIA, IL	0.980	1.009	-0.029	-2.9
00621	02	ROCKFORD, IL	0.978	1.010	-0.032	-3.2
00528	02	SHREVEPORT, LA	0.971	1.003	-0.032	-3.2
00900	09	BRAZORIA, TX	0.993	1.025	-0.032	-3.1
00900	23	MIDLAND, TX	0.991	1.023	-0.032	-3.1

gpci\physrpt\APP6.XLS

APPENDIX 6

DIFFERENCE BETWEEN 1996 RESCALED PHYSICIAN WORK GPCI AND 1992 PHYSICIAN WORK GPCI, BY MEDICARE PAYMENT LOCALITY, RANKED IN DESCENDING ORDER OF DIFFERENCE

Carrier Number	Locality Number	Locality Name	1996 Rescaled Quarter Work	1992 Quarter Work	Change	Percent Change
00973	50	VIRGIN ISLANDS	0.966	1.000	-0.034	-3.4
01020	01	ALASKA	1.064	1.106	-0.042	0.0

CMS LIBRARY
3 8095 00014105 7